APPEARANCES

BOARD MEMBERS
Ms. Mary Nichols, Chairperson
Dr. John Balmes
Ms. Sandra Berg
Ms. Dorene D'Adamo
Mr. Hector De La Torre
Mrs. Barbara Riordan
Supervisor Ron Roberts
Mr. Phil Serna
Dr. Alex Sherriffs
Professor Daniel Sperling

STAFF
Mr. James Goldstene, Executive Officer
Mr. Alberto Ayala, Deputy Executive Officer
Mr. Richard Corey, Deputy Executive Officer
Ms. Lynn Terry, Deputy Executive Officer
Ms. Ellen Peter, Chief Counsel
Ms. La Ronda Bowen, Ombudsman
Ms. Analisa Bevan, Chief, Sustainable Transportation Technologies Branch
Ms. Trish Johnson, Air Pollution Specialist, SSD
APPEARANCES CONTINUED

STAFF
Ms. Lisa Macumber, Air Pollution Specialist, Air Quality Improvement Program, Mobile Source Control Division
Ms. Annalisa Schilla, Ph.D., Climate Action and Research Planning Section, Research Division

ALSO PRESENT
Ms. Nidia Batista, Coalition for Clean Air
Mr. Tim Carmichael, California Natural Gas Vehicle Coalition
Mr. Wade Crowfoot, Deputy Director, Governor's Office of Planning and Research
Ms. Bonnie Holmes-Gen, American Lung Association of California
Ms. Kristen Power, CSPA
Mr. Doug Raymond, National Aerosol Association
Mr. Matt Schrap, Crossroads
Ms. Karen Snyder
Mr. Zeltzer, UVWA
<table>
<thead>
<tr>
<th>Consent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 13-3-1</td>
<td></td>
</tr>
<tr>
<td>Item 13-3-2</td>
<td></td>
</tr>
<tr>
<td>Motion</td>
<td>5</td>
</tr>
<tr>
<td>Vote</td>
<td>5</td>
</tr>
<tr>
<td>Item 13-3-3</td>
<td></td>
</tr>
<tr>
<td>Executive Officer Goldstene</td>
<td>5</td>
</tr>
<tr>
<td>Staff Presentation</td>
<td>28</td>
</tr>
<tr>
<td>Ms. Power</td>
<td>28</td>
</tr>
<tr>
<td>Mr. Raymond</td>
<td>28</td>
</tr>
<tr>
<td>Mr. Carmichael</td>
<td>29</td>
</tr>
<tr>
<td>Motion</td>
<td>30</td>
</tr>
<tr>
<td>Vote</td>
<td>30</td>
</tr>
<tr>
<td>Item 13-3-4</td>
<td></td>
</tr>
<tr>
<td>Chairperson Nichols</td>
<td>31</td>
</tr>
<tr>
<td>Executive Officer Goldstene</td>
<td>32</td>
</tr>
<tr>
<td>Staff Presentation</td>
<td>33</td>
</tr>
<tr>
<td>Motion</td>
<td>43</td>
</tr>
<tr>
<td>Vote</td>
<td>43</td>
</tr>
<tr>
<td>Item 13-3-5</td>
<td></td>
</tr>
<tr>
<td>Chairperson Nichols</td>
<td>74</td>
</tr>
<tr>
<td>Executive Officer Goldstene</td>
<td>75</td>
</tr>
<tr>
<td>Staff Presentation</td>
<td>76</td>
</tr>
<tr>
<td>Ms. Batista</td>
<td>89</td>
</tr>
<tr>
<td>Item 13-3-6</td>
<td></td>
</tr>
<tr>
<td>Chairperson Nichols</td>
<td>97</td>
</tr>
<tr>
<td>Executive Officer Goldstene</td>
<td>98</td>
</tr>
<tr>
<td>Staff Presentation</td>
<td>100</td>
</tr>
<tr>
<td>Motion</td>
<td>110</td>
</tr>
<tr>
<td>Mr. Schrap</td>
<td>111</td>
</tr>
<tr>
<td>Vote</td>
<td>113</td>
</tr>
</tbody>
</table>
## INDEX CONTINUED

<table>
<thead>
<tr>
<th>Item 13-3-8</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairperson Nichols</td>
<td>114</td>
</tr>
<tr>
<td>Executive Officer Goldstene</td>
<td>115</td>
</tr>
<tr>
<td>Ombudsman Bowen</td>
<td>115</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Comment</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Zeltzer</td>
<td>132</td>
</tr>
<tr>
<td>Ms. Snyder</td>
<td>134</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjournment</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>148</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporter's Certificate</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>149</td>
</tr>
</tbody>
</table>
PROCEEDINGS

CHAIRPERSON NICHOLS: Good morning, everybody.

This is the March 21st, 2013, public meeting of the Air Resources Board. And I will call the meeting to order. We will start as we generally do by saying the Pledge of Allegiance to the flag. Please rise.

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

CHAIRPERSON NICHOLS: Madam Clerk, would you please call the roll.

BOARD CLERK JENSEN: Dr. Balmes?

Ms. Berg?

BOARD MEMBER BERG: Here.

BOARD CLERK JENSEN: Ms. D'Adamo?

BOARD MEMBER D'ADAMO: Here.

BOARD CLERK JENSEN: Mr. De La Torre?

Mrs. Riordan?

BOARD MEMBER RIORDAN: Here.

BOARD CLERK JENSEN: Supervisor Roberts?

BOARD MEMBER ROBERTS: Here.

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?

CHAIRPERSON NICHOLS: Here.

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

CHAIRPERSON NICHOLS: Great.

I have a couple of announcements before we get started this morning, and I should also note one change which is that I'm going to make a few personal remarks and expect others on the Board will want to as well after we get to the end of our agenda.

But I do want to welcome our newest Board member, Supervisor Serna, who is with us this morning for the first time. So we're very happy to have him here.

We have a slight change in the agenda order today. Following Agenda Item 13-3-4, the appointment of the Environmental Justice Advisory Committee under AB 32, we're going to hear Agenda Item 13-3-7, which is an update on the Governor's Zero Emission Vehicle Executive Order Action Plan. That's a mouthful. But it's our opportunity to hear about what's in the ZEV order.

I want to announce that interpretation services are available in Spanish for anyone who would like them. Headsets are available outside the hearing room at the sign-in table. Interpretation services have been
requested for our fourth item, the Environmental Justice Advisory Committee Item. And that will be available until lunch.

(Whereupon the announcement was made in Spanish.)

CHAIRPERSON NICHOLS: Thank you.

Anyone who wishes to testify and hasn't signed up online should fill out a request to speak card. They're available also in the lobby outside the boardroom. We appreciate it if you would turn it into the clerk as soon as possible so that she can sort out the list of speakers. And including your name as optional.

If you have already signed up online to speak, you don't need to fill out a card. But you do need to check in with the clerk so she knows you're here. Otherwise, your name will be removed from the speakers' list.

Also, we're going to be following our usual practice of imposing a three-minute time limit on speakers. So we appreciate it if when you come up to the podium you would state your name and then put your testimony into your own words. If you have written testimony, we will have received it. And you don't need to read your written testimony, since it will already be in the record.
Finally, I have to note that there are emergency exits to the rear and to my right in this room. In the event of a fire alarm, we're required to evacuate this room immediately and go down the stairs and out of this building until we hear the all-clear signal when we can return to the hearing room and resume the hearing.

I have to smile when I make that statement, because it's something we're required to do every meeting, and I've always done it basically read it straight as it's supposed to be. But I attended the retirement party for my friend and colleague, Charlie Hoppin, who is the long-time Chairman of the State Water Resources Control Board, which took place this week. And his staff did a video of him giving that announcement about the exits over his years on the Board, and some of them are hilarious. Many of them are unprintable. But he really had a good time with that. So I'm thinking maybe I've been taking it too seriously. So there could be a change by the time of the next meeting. Stay tuned.

I think we should actually begin with the agenda at this point. The first items are consent items. We have first the appointment of a new member to the Research Screening Committee. If anybody needs any further comment or if there is anybody who wants to take that item off consent -- if not, could I just have a motion?
BOARD MEMBER RIORDAN: Move consent calendar.

BOARD MEMBER D'ADAMO: Second.

CHAIRPERSON NICHOLS: And we'll separately take up the two research proposals that were in front of us. Any questions? Comments? Testimony on those? Seeing none, we have a motion and a second.

Any opposition? Great. All right.

Now we'll move on then to the proposed research plan.

EXECUTIVE OFFICER GOLDSTENE: Good morning, Board members. Thank you, Chairman Nichols.

There are ten projects in this year's research plan recommended for funding. This list of proposed projects addresses high priority research needs to support our air quality and climate programs.

The proposed projects will specifically address the air quality impacts of consumer product emissions, health effects of exposure to multiple pollutants, effectiveness of diesel emission reduction technology, trends among zero emission vehicle buyers, feasibility of the low-carbon intensity fuels, and potential unintended effects of sustainable community strategies.

If approved by the Board, the projects described in the Research Plan will be developed into full proposals and then brought back to the Board for your final approval.
over the next several months.

With that, I'd like to introduce Annalisa Schila
of the Research Division who will describe the proposed
studies. Dr. Schilla.

(Thereupon an overhead presentation was
presented as follows.)

DR. SCHILLA: Thank you, Mr. Goldstene.

Good morning, Chairman Nichols and members of the
Board.

--o0o--

DR. SCHILLA: Today, we are asking the Board to
approve the proposed 2013/2014 research plan. The plan
has ten research concepts that will support the Board's
decision making for key policies and programs at a cost of
$4.4 million.

If the plan is approved today, staff will work
with researchers over the next few months to develop
concepts into full proposals. We will then take proposals
to the Board's Research Screening Committee for review
before returning to the Board to request approval and
funding for each research project.

--o0o--

DR. SCHILLA: This research plan proposes funding
projects in six of ARB's key program areas. Funds will be
used to address research needs related to air pollution's
health effects and State Implementation Plans and will support the advanced clean cars, low-carbon fuel standard, sustainable communities, and diesel programs.

---o0o---

DR. SCHILLA: ARB's Research Program will continue to play an important role in meeting the challenges of increasingly stringent federal air quality standards and long-term climate goals.

The projects included in this Research Plan will improve ARB's ability to meet and demonstrate compliance with lower PM2.5 and ozone standards and to achieve greenhouse gas emissions reductions consistent with climate goals through 2050.

---o0o---

DR. SCHILLA: For this year's Research Plan, ARB staff streamlined the development process in order to focus on the Board's highest priority research needs and to utilize the entire three-year life of State funds allocated for research.

ARB's Research Planning staff collected input from across ARB's divisions to identify and prioritize research to support the agency's most pressing program needs, such as future updates to State Implementation Plans and the advanced clean cars, low carbon fuel standard, diesel, and sustainable communities programs.
Staff developed scopes of work for projects in-house and released a solicitation for draft proposals which targeted the University of California and California State University systems.

Staff continue to coordinate with air districts and other California and federal agencies to ensure that our research portfolio is non-duplicative of already-funded work, leverages the State's available research funding, and produces results that have the greatest program benefits.

--o0o--

DR. SCHILLA: As part of the Board's ongoing effort to improve California's air quality, ARB will continue to fund research to support State Implementation Plans.

Past and ongoing research in this area has focused on the causes of and solutions to ozone and PM2.5 non-attainment in the San Joaquin Valley, South Coast, and other air basins. Recent projects have included field, laboratory, and modeling studies to improve emission inventories and PM2.5 chemistry. As air quality standards are tightened, new air quality modeling must be done and plans developed to further reduce air pollution.

By 2023, consumer products are projected to be the largest source of volatile organic compounds in the
South Coast air basin. Current estimates of emissions of low vapor pressure VOCs that could effect air quality are about 39 tons per day, constituting 13 percent of the consumer products inventory.

The need for research to better characterize the air quality impacts of LVP VOCs was raised at the January 2013 Board meeting when the South Coast Air Quality Management Plan was approved, and staff propose funding two research projects on this topic.

--o0o--

DR. SCHILLA: Low vapor pressure VOCs are ingredients used in some consumer products to comply with ARB's consumer products regulations, because the regulations provide an exemption for these compounds.

The exemption covers products such as floor cleaners, hair care products, windshield washer fluid, and paint thinners and was originally intended to exclude compounds that do not readily participate in ozone formation. But some recent laboratory testing indicates that certain LVP VOCs may have previously unrecognized air quality impacts.

The first proposed project will investigate the ambient evaporation rates of LVP VOCs both at pure compounds and in consumer products sold in California. The researchers will also conduct environmental chamber
studies to explore ozone and PM2.5 formation from these compounds. The results of this project will improve estimates of the emission rates of LVP VOCs and their impacts on air quality.

--o0o--

DR. SCHILLA: The second proposed project is closely linked to the project just described, but this project will focus on the environmental fate of LVP VOCs. The goal with this study is to develop a model to investigate the air quality impacts associated with the environmental fate of consumer products that contain LVP VOCs.

For example, when products are disposed of down the drain, interactions with water and potential emissions at water treatment plants may need to be accounted for. The results of this project will improve understanding of the role that different environmental fates play in determining the air quality impacts of LVP VOCs.

Together, these two research projects will inform ARB's assessment for the LVP VOC exemption in the consumer products regulations.

--o0o--

DR. SCHILLA: Next, I will describe this year's planned health effects research.

ARB's Health Effects Research Program seeks to
characterize the health impacts of California's air pollution, particularly from PM2.5 and ozone, and adds to the body of scientific literature that the U.S. EPA considers in their review of the national ambient air quality standards. Although it has been well-documented that air pollution exposure leads to adverse health effects, the biological mechanisms which cause these associations are only beginning to be understood.

Previously, ARB-funded research has demonstrated that PM2.5 exposure leads to an increased risk of blood clots and that removal of semi volatile organic compounds significantly reduces the toxicity of the PM2.5.

Staff proposed funding two projects that will investigate the interactions and synergies associated with simultaneous exposure to multiple pollutants.

--o0o--

DR. SCHILLA: The first proposed health study will examine a possible biological pathway for PM2.5 and ozone-induced cardiovascular disfunction in rats, specifically looking at the role of the central nervous systems in causing cardiovascular effects.

The researchers will monitor breathing patterns and heart rate variability during various exposure regimens to examine the influence of PM2.5 and ozone exposure on cardiac function.
After the experiment, researchers will evaluate various health endpoints indicative of cardiovascular impacts. The results of this study will improve understanding of the biological mechanisms which lead to air pollution's health effects and help characterize the health impacts of air pollution exposure.

--o0o--

DR. SCHILLA: Many studies have reported a significant association between exposure to either PM2.5 or ozone and adverse cardiovascular effects, but further research is needed to understand the effects of simultaneous exposure to ozone and PM2.5 on artheroscleroses. For this project, researchers will expose mice to various concentrations of PM2.5 and ozone alone and in combination. The mice will also be exposed to air samples in which the organic components of PM2.5 have been removed.

In order to test the hypothesis, the organic fraction of PM2.5 plays a key role in progression of artheroscleroses. The researchers will examine various cardiovascular endpoints to evaluate the mice's response to these exposures. The results of this study will improve understanding of the health effects of simultaneous exposure to multiple pollutants.

--o0o--
DR. SCHILLA: Now I will turn to this year's planned diesel research.

Diesel engines are a major source of air pollutants in California. ARB's Diesel Research Program seeks to characterize how emissions are affected by new regulations, fuels, and emission control technologies and to confirm that the emissions and adverse health effects of diesel combustion continue to decrease.

Ongoing research is characterizing the degradation and failure rates of diesel particulate filters and selective catalytic reduction in southern and northern California and around ports. However, research is needed to further evaluate how SCR technology functions under California driving conditions. Staff proposed funding one project in this area.

--o0o--

DR. SCHILLA: The proposed diesel project will assess the in-use patterns of SCR equipped heavy-duty trucks operating in California and will provide insights into the on-road effectiveness of SCR for reducing emissions.

Because selective catalytic reduction requires minimum temperatures of around 200 degrees to operate, heavy-duty cold starts and low load operations could render the SCR ineffective for reducing NOx. Researchers
will document how trucks are used from travel surveys and English control unit or onboard diagnostic data for various different trucks, uses such as line haul, drayage, and delivery.

Results from this project will inform possible improvements to emission certification and compliance procedures and improve emission's forecasts.

---o0o---

DR. SCHILLA: Next I will describe this year's planned research to support implementation of the Advanced Clean Cars Program.

Passenger travel is a major source of criteria and toxic air pollutants and greenhouse gas emissions in California. ARB Advanced Clean Cars Program will provide emission reductions from light-duty vehicles needed to meet air quality standards and climate goals.

Governor Brown's Executive Order B-16-2012 also established goals for expanding Californian's access to zero emission vehicles and supporting infrastructure. You will hear more about the State's Action Plan to Support those goals in an update to the Board later today.

ARB has initiated research that will examine consumer response to ZEVs, how ZEVs are being used, compliance strategies, and PM measurement. Research in these areas is being coordinated with the U.S. EPA, U.S.

Understanding consumer vehicle purchase decisions related to ZEVs will be a critical factor to support implementation of the ZEV program and to inform the mid-term review of the Advanced Clean Cars Program, but the factors that influence these decisions are only beginning to be understood. Staff propose funding one project to address this research need.

--o0o--

DR. SCHILLA: Although the current zero emission vehicle market is relatively small, recent commercialization of some ZEVs has allowed for more empirical evaluation. However, to date, none of these efforts has been a comprehensive characterization of the recent wave of ZEV buyers in California.

This project will establish a method to evaluate the socioeconomic and geographic characteristics of ZEV buyers for the entire state, relying on vehicle registration data and other data sources to understand how these buyers are changing as vehicle offerings and incentives evolve. This research will complement ongoing research by providing a broader perspective of the overall ZEV landscape.

The results of this study will describe the
current zero emission vehicle market and will improve understanding of ZEV market potential in California.

---o0o---

DR. SCHILLA: Next, I will describe this year's planned research to support the low carbon fuel standard. In order to achieve California's climate and air quality goals, emissions from transportation will need to be significantly reduced in the coming decades.

ARB's low carbon fuel standard aims to reduce the carbon intensity of California's transportation fuels by ten percent by 2020 and incentivizes the production and sale of low-carbon intensity transportation fuels through performance standards for fuel producers and importers.

Recent research funded by ARB and others is investigating the environmental impacts, development, and demonstration of various fuels and production facilities. Research is needed to examine the availability and environmental impacts of renewable natural gas as a near-term fuel option and drop-in fuels which are compatible with existing infrastructure in vehicles over the longer term. Two projects are proposed to address these topics.

---o0o---

DR. SCHILLA: Renewable natural gas is a promising near-term, low carbon intensity transportation
fuel for both light-duty and heavy-duty vehicle applications.

The LCFS regulation already incorporates a number of pathways for renewable natural gas production, such as landfill gas, dairy digesters, and high solids and anaerobic digesters.

Widespread large scale production of renewable natural gas would help achieve California's greenhouse gas emission reduction objectives, but more research is needed to facilitate the market penetration of this fuel.

This project will examine renewable natural gas production and distribution, particularly for transportation fuel use in California. The researchers will develop a map of current and potential production sites and will examine the costs and feasibility and environmental impacts of large scale production and use. They will evaluate optimization of facility locations in order to maximize production and minimize environmental impacts. The researchers will also identify potential barriers to expanded production and strategies to overcome them.

The results of this research will provide insights into the economic and environmental feasibility of large-scale production and use of renewable natural gas as a low carbon transportation fuel in California.
DR. SCHILLA: Drop in fuels are cleaner alternatives to fossil derived gasoline and diesel fuels that would require the least modification to the existing infrastructure and vehicle fleet. In order to be commercially viable, the fuels need to be available in sufficient quantities and at competitive prices.

Drop-in fuels are currently in a research and development phase, with pilot and demonstration scale plants under construction, but further research on the feasibility and cost effectiveness of producing these fuels is needed.

For this project, researchers will analyze the technology, feasibility, costs, and environmental impacts of drop-in fuels at both demonstration and commercial scales.

The researchers will consider a variety of different production pathways, including conversion of alcohol or sugars to hydrocarbons, algal oils, upgrading syngas and conversion of biomass to bio oil.

They will perform a geospatial analysis to estimate where fuel production facilities could be located in order to maximize production and minimize environmental impacts. And they will develop strategies to monitor and track supplies, costs, and progress of these technologies.
The results of this project will help assess the potential for production and use of drop-in fuels for achieving California's climate and air quality goals.

---o0o---

DR. SCHILLA: Finally, I will describe this year's planned sustainable communities research.

ARB's sustainable community program aims to reduce greenhouse gas emissions and improve air quality and health for all Californians.

Current research funded by ARB and others is designed to improve estimates of vehicles miles traveled, greenhouse gas emissions reductions, and air pollution exposure associated with land use and transportation planning strategies.

As California regions pursue more compact transit-oriented development as part of their sustainable community strategies, research is needed to assess the benefits and the potential for any unintended adverse impacts and to examine strategies to mitigate air pollution exposure. Two projects are proposed this year to address these topics.

---o0o---

DR. SCHILLA: SB 375 requires each metropolitan planning organization in California to develop a sustainable communities strategies that demonstrates how
they will meet regional greenhouse gas reduction targets set by ARB. Many MPOs are relying on transit-oriented development to help meet their targets, but environmental justice organizations have expressed concern about the potential for displacement of low-income residents.

In addition, the displacement of low-income residents, who are more likely to rely on transit by higher income residents who may be more likely to travel by car, could decrease the reductions in vehicle miles traveled that might otherwise be achieved by transit oriented development.

MPOs have been begun evaluating the potential for displacement, but there is a need for more robust analytical tools. As a result, ARB is partnering with MPOs on this proposed project.

This study will provide insights into the relationship between transit-oriented development and potential displacement of low-income residents, including analyzing the VMT impacts.

This research will provide tools that MPOs can use to evaluate potential displacement impacts of their sustainable community strategies, as well as identify possible solutions. This project will help ensure that low-income communities share in the benefits of transit-oriented development.
DR. SCHILLA: Metropolitan planning organizations and environmental justice stakeholders have also expressed interest in strategies to mitigate air pollution exposure of residents living near air pollution sources, such as high traffic roadways. ARB staff have identified sound wall vegetation combination barriers as a promising option that requires further research.

Although progress has been made in reducing air pollution exposure of residents living near roadways and other pollution sources, strategies that can further reduce exposure would provide important near-term benefits.

ARB has several research projects underway to examine exposure mitigation approaches, such as high efficiency filtration in homes and vehicles. Studies have shown sound walls may reduce near-roadway pollution exposure by 50 percent, but there are concerns that the pollution impacts may be shifted to other locations.

Further research is needed that examines the benefits of adding vegetation to sound walls and that identifies the specific conditions under which sound wall/vegetation combination barriers can reliably provide an exposure reduction benefit to California residents.

This project will evaluate the variability and
effectiveness of these barriers in various urban settings and meteorological conditions. Sampling will include real-time field measurements of traffic-related pollutants, meteorology data, and traffic activity patterns. Results of this research will help inform guidance for local governments and planning agencies on effective strategies for reducing air pollution exposure.

DR. SCHILLA: The projects included in this year's research plan will support the Board's decision making in a number of key program areas.

In order to ensure that ARB's research program compliments other funding efforts and provides the greatest program benefits, ARB staff continue to coordinate with federal, State, and local agencies.

For both the Advanced Clean Cars Program and Low-Carbon Fuel Standard, federal and State agencies are funding closely related work.

Similarly, ARB is partnering with MPOs and Caltrans on sustainable communities research. ARB staff are coordinating closely with those agencies to ensure that our research portfolios remain complementary.

In addition, several large-scale federally funded greenhouse gas and air quality research efforts are underway in California. And as a result, this year's
research plan includes relatively little research in these areas. The National Institute of Standards and Technology is providing several million dollars in funding for the Los Angeles Mega Cities Project, to monitor greenhouse gas trends in the L.A. region.

And the National Aeronautics and Space Administration is funding two major air quality research efforts in California, both of which launched in 2012. NASA chose the San Joaquin Valley as one of the sites for the Discover AQ study, which includes both flights and on-the-ground monitoring to characterize the complex flow and movement of air and pollutants above the valley.

And in November of 2012, NASA's air quality applied sciences team held their fourth biannual meeting at the Cal/EPA building in Sacramento specifically to get input from ARB and the California air districts on air quality concerns and modeling needs that could be addressed collaboratively.

ARB staff will continue to coordinate with these and other partners to leverage ARB's limited research dollars.

--o0o--

DR. SCHILLA: If the 2013-2014 Research Plan is approved today, staff will work with our research partners to bring full proposals to the Research Screening
Committee. And then we will return to the Board to request approval and funding for each project. We recommend that you approved the 2013-2014 annual research plan.

CHAIRPERSON SAWYER: Thank you, Dr. Schilla. Before we turn to the two speakers who signed up to speak, do Board members have any questions they would like to raise or comments on this plan?

Dr. Sperling?

BOARD MEMBER SPERLING: Just a quick comment. I've been working with the staff these last few years on the Research Program, and I think we've been making good progress in coming up with research that's more valuable, frankly, to the agency, that's more targeted towards the needs of the agency in terms of forming rules and understanding what's needed, developing the tools for it. And so, you know, I'm quite pleased to see that.

I think we're focusing on important topics, and I think that the good projects are being designed more and more. There's always -- it can always be done better and the needs are always changing. But it is focused more on the needs of the regulatory program and being more mission-oriented. I think for an agency with a limited budget and a large regulatory agenda, that's very important.
And you know, I just would say it is a big challenge putting together an effective, efficient research program. It does require, in this case, coordinating across all the different parts of the agency, what's needed in the different programs and the research staff communicating with them. It requires a lot of foresight, you know, anticipating what are our needs going to be in five years. And it just requires a lot of sophisticated understanding of the issues. So I see good progress. And so that's a kudo to the improvements that have been made and the encouragement follow the path.

CHAIRPERSON NICHOLS: Thank you. That's very helpful.

Dr. Balmes.

BOARD MEMBER BALMES: First off, I would like to echo Professor Sperling's comments in general. I think the last couple years the staff has really learned to focus on what's important issues that we need to address.

But I have to say when I was assigned to the Research Subcommittee of the Board that I was a little concerned it would negatively effect the health effects research this agency has done a great job and.

I still think the Children's Health Study is the single most important air pollution study that's ever been done. And this agency started that, that research.
And I have to say, I'm pleasantly pleased I don't think the health effects research has been diluted at all by our focus on having regulatory relevant projects. I was a little concerned about that with health effects research. As you can see from the proposals that are in the plan, we're still looking at understanding basic mechanism, which I think is important, especially given the federal budget problems. So there will be decreased U.S. EPA moneys available for this kind of research.

I applaud the staff for improving in terms of targeting the research to what the data gaps we need to address for regulatory purposes, but also maintaining the quality of the health effects research.

CHAIRPERSON NICHOLS: Thank you for that. I think it's particularly challenging given the fact that our resources aren't growing, commensurate with the need either. I look at the price tags on some of these studies in comparison with what I know can be and used to be the case sometimes when there was big federal money available. It's impressive that we think we can really good research out of some of these projects. So thanks for that.

Any comments from the Board members? Okay.

I'll turn to the speakers then. We have three. Kristen Power, followed by Doug Raymond and then Tim Carmichael.
MS. POWER: Madam Chair, members of the Board, I appreciate the opportunity to support the Air Resources Board proposed research plan for fiscal year 2013-2014. I'm Kristen Power with the Consumer Specialty Products Association.

The Consumer Specialty Products Association representing the interests of companies engaged in the manufacturer, formulation, and distribution of sales of consumer products that help households and institutional customers create cleaner and healthier environments, and our member companies have worked collaboratively with the Air Resources Board staff since the late 1980s to reduce VOCs in products through the development of successive rulemakings on the consumer products and aerosol coatings regulations.

We think research, such as that proposed in the air quality impacts of low vapor pressure volatile organic compounds study, is essential to future regulatory actions to meet federal and State air quality standards.

We support funding of the research. And in fact, industry groups are undertaking research we believe will be complimentary and supplemental to the proposed study to ensure scientific data is available to continue the development of strategies to achieve long-term ozone attainment strategies.
Related to this study, Air Resources Board staff is developing draft amendments to the consumer products regulation that include changes to how the low vapor pressure compounds are regulated.

In addition to asking for Board support for funding this critical research, we ask the research we are discussing today precede any regulatory action impacting low vapor pressure compounds.

Thank you for the opportunity to support the research.

CHAIRPERSON NICHOLS: Thank you.

Doug Raymond.

MR. RAYMOND: Good morning, Madam Chair, members of the Board.

My name is Doug Raymond. I'm here representing the National Aerosol Association. In discussions with ARB management, we were encouraged to comment on this issue. We are here to support the studies for the impacts of low vapor pressure compounds. We have worked cooperatively with the staff for more than 20 years on making feasible rules. We believe the study is necessary to -- we need science in the area of the LVPs.

We have one concern. Our concern is that there is a current rule development that we brought before you in July that concerns the LVP issue. We would ask that
any changes to the LVP be delayed until after these
studies are done. We're here to support the study. We
believe it's necessary. But we don't believe any changes
should be made to the status of the LVPs until that study
is completed. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Tim Carmichael. You're reprising your role as the
last speaker.

MR. CARMICHAEL: I'm trying to shed that label.

Good morning, Chairman Nichols, members of the
Board. Tim Carmichael with the California Natural Gas
Vehicle Coalition. Here to support the research proposal
for the next year.

I want to bring to your attention one item which
we're very keen on. And that's a study looking at the
feasibility of renewable natural gas as a significant fuel
for heavy-duty transportation in California.

We have looked at this. CAL START, some of the
universities have looked at this over the last few years,
and we all think that there is a significant opportunity
for renewable natural gas to be a major player in the
heavy-duty transportation sector.

But this study will I think give more credence to
our beliefs on what's possible there. And I just want to
remind the Board that we're talking about biomethane, a
renewable natural gas, which can be produced from a
variety of waste streams from landfills to wastewater
treatment facilities to ag waste streams. And there is a
lot of potential to produce that fuel here in California.
And we're talking about a fuel that is one of the lowest
identified carbon intensity fuels that ARB has been able
to find thus far.

So with that, we encourage your support and glad it's on the list.

CHAIRPERSON NICHOLS: Thank you. We appreciate that.

Okay. If there are no further comments or question I think should --

BOARD MEMBER SHERRIFFS: Motion.

BOARD MEMBER BERG: Second.

CHAIRPERSON NICHOLS: Okay. Moved and seconded.

All in favor please say aye.

(Ayes)

CHAIRPERSON NICHOLS: Any opposed?

Any abstentions?

Okay. Great. Thank you all very much.

I want to echo the support for the progress that's been made in terms of developing a really focused research plan. Appreciate it. These are some tough areas to get into effectively, too, particularly some of the
newer social science work. This is nice to see it evolving. Thank you.

We will move next to the appointment of a new Environmental Justice Advisory Committee. And I think staff are changing places here. Just want to say that over the past several years we worked to develop and implement programs under AB 32, we've had a number of different advisory committees who have helped us along the way providing expertise and a variety of different kinds.

We also had the benefit in the early days back in 2007 of an Environmental Justice Advisory Committee which was actually described in the legislation itself. The original EJAC, as we called them, focused on cap and trade design issues, economic and technology-related issues, and the low-carbon fuel standard in its early days of development. All of these things in various ways have been valuable.

And I think it's important to recognize that in some cases, including notably our Blue Ribbon Economic Advisory Committee, we ended up not following their recommendations. In fact, we went in a completely different direction. But never the less, it helped us a lot to focus on what the real issues were. And I have to say that they were very gracious, considering how much of their time and expertise they provided to us that.
Although they made it clear they would have preferred we had gone in a different direction, there was a question of -- if you'll remember back to those days -- auctioning versus the free distribution of allowances. They understood that there were policy reasons to go in the different direction. And the backdrop of that has continued to help I think inform our thinking about how we move.

As far as the Environmental Justice Advisory Committee goes, AB 32 directs the Board to focus on implementing our rules in such a way that we also provide co-benefits, including reducing criteria pollutants and toxic emissions, particularly in disadvantaged communities. So it's really sort of an overarching concern of our work under AB 32.

As we begin work on updating the Scoping Plan, we really need to reactivate this Committee to help us continue to make progress on this front, particularly as we're looking at some new and different approaches to reducing greenhouse gas emissions.

So we are going to be looking at a list of new appointees potentially.

So I'll ask Mr. Goldstene to introduce the item.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.
As you'll recall, AB 32 directed the Board to convene an Environmental Justice Advisory Committee of at least three members by July 1st, 2007, to advise the Board in developing the Scoping Plan and any other pertinent matter to implement the California Global Warming Solutions Act of 1996. We did so in 2007 to support the original Scoping Plan.

Staff is proposing that the Board appoint a new Environmental Justice Advisory Committee to advise the Board on development of the 2013 update to the Scoping Plan.

Staff evaluated the nominations and is proposing Committee members that represent regions of the state with the most significant exposure to air pollution, including communities with minority population or low income populations.

I'll now ask Ms. Trish Johnson to begin the staff presentation.

(Thereupon an overhead presentation was presented as follows.)

MS. JOHNSON: Good morning, Chairman Nichols and members of the Board.

--o0o--

MS. JOHNSON: Today, I will provide a background on the Environmental Justice Advisory Committee and
staff's proposal to reconvene the Committee, the proposed Committee members, and staff's recommendations.

--o0o--

MS. JOHNSON: AB 32 directed ARB to convene an Environmental Justice Advisory Committee by July 1st, 2007, to advise the Board in developing the Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and any other pertinent matter in this implementing the California Global Warming Solutions Act of 2006.

Pursuant to Assembly Bill 23, ARB convened the Environmental Justice Advisory Committee in January 2007 to advise it on the development of California's Climate Change Scoping Plan and other AB 32 program areas.

The 2008 Scoping Plan was approved by the Board on December 12th, 2008, and reapproved on August 24th, 2011.

--o0o--

MS. JOHNSON: AB 32 further directs ARB to update the Scoping Plan at least once every five years.

Staff is proposing to reconvene the Environmental Justice Advisory Committee to advise in the development of the 2013 Scoping Plan update that staff plans to bring to the Board before December of this year.

Staff solicited nominations for the Environmental Justice Advisory Committee. The proposed Committee members, and staff's recommendations.

California Reporting, LLC
Justice Advisory Committee from January 22nd through March 1st. Members that had previously served on the Committee were eligible to resubmit nominations. Two of the members that we are recommending today resubmitted nominations.

--o0o--

MS. JOHNSON: Staff learned some key lessons from our initial work with the Environmental Justice Advisory Committee that can be used to facilitate an effective and results-oriented process.

Staff plans to work with the Committee to establish clear objectives and to develop a process that enables effective engagement. As we discussed with you in December of last year, a major focus of the Scoping Plan update will be to look at specific sectors and the ways that we can develop and implement comprehensive sectorial approaches to reducing greenhouse gas emissions and achieving additional co-benefits, like improvements in air quality, including in disadvantaged communities. The sectors of focus will be transportation, water, agriculture, energy, waste, and natural resources.

In addition, staff will provide support to the Committee throughout this process.

--o0o--

MS. JOHNSON: A total of nine eligible nominations were received and accepted. Staff is
recommending that all nine individuals be appointed to serve on the Environmental Justice Advisory Committee.

--o0o--

MS. JOHNSON: The proposed members include Martha Dina Arguello from Physicians for Social Responsibility; Nicole Capretz from Environmental Health Coalition in San Diego; Gisele Fong from End Oil; and Susan Riggs Tinsky from San Diego Housing Federation representing southern California both the Los Angeles and San Diego regions. Tom Frantz from the Association of Irrigated Residents represents the San Joaquin Valley.

--o0o--

MS. JOHNSON: Kemba Shakur from Urban Relief and Mari Rose Taruc from Asian Pacific Environmental Network represent the Bay Area. Monica Wilson from Global Alliance from Incinerator Alternatives and Ryan Briscoe Young from The Greenlining Institute represent statewide organizations.

--o0o--

MS. JOHNSON: Staff recommends that the Board approve the nine individuals proposed to serve on the Environmental Justice Advisory Committee.

CHAIRPERSON NICHOLS: Thank you, Trish. I don't believe we had anybody signed up to comment on this item. I'm personally acquainted with a
number, although not all, of the people who are on this lift. The ones that I do know I think very highly of and I think they will do an excellent job. So I'm pleased to support them.

I wanted to challenge just a little bit your statement about representing a particulate area. Because I think the fact that a person lives in a place, although that's significant and we should be seeking geographical representation or geographical diversity, maybe would be a better word for it, I don't think it's fair to say a person represents the area that they're from. I think that's asking a lot of them when they are here because they were nominated by a particular organization.

But there may be lots of other organizations in that area that weren't selected or, you know, they may not feel like they have to cover every piece of the geographic territory that they're from. So I think we should just be a little bit careful about that.

I know a couple Board members also have been following this with great interest and have some comments. I'll start with you, Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Thank you.

I appreciate the efforts and the outreach that went into getting these folks to apply and then to be selected. However, I think that, kind of along the lines
of Chairman Nichols' comments, while folks may not
represent a geographic location, you want to have
geographic diversity on this panel. And it seems to me
just by looking at where these folks are that we're a
little short inland in the state. So I think it would be
helpful to expand the Board a little bit, have a more
inland representation, namely the Inland Empire and the
Central Valley. So I have a some language here that I'd
like to share.

"Be it further resolved, the Board delegates to
the Executive Officer at his or her designee authority to
select and appoint up to three additional Committee
members from underrepresented regions of the state,
including the San Joaquin Valley and the Inland Empire."

CHAIRPERSON NICHOLS: Yes. Do you want to second
that?

BOARD MEMBER BALMES: I do want to second that.
Just to add, if we're talking about economic justice here,
we really have to have folks "representing" or from the
most impacted areas in the state, which I think is the
Central Valley and the Inland Empire. So I hardly second
Mr. De La Torre's motion.

CHAIRPERSON NICHOLS: Thank you. We'll include
that as an amendment into the resolution.

Yes, Mr. Serna.
BOARD MEMBER SERNA: Thank you, Madam Chair.
I would offer maybe a friendly amendment to the amendment. I think the reference was made to the San Joaquin Valley that was made to the Central Valley I think that would be a little more inconclusive.

BOARD MEMBER DE LA TORRE: Okay.

CHAIRPERSON NICHOLS: Do you accept that? That's a terrific addition and proves why it was so smart to add somebody from that region to the Board.
Any other comments on this?

BOARD MEMBER SHERRIFFS: Could you just expand a little bit more as what you see is the charge for this Committee?

MS. JOHNSON: The initial charge for the Committee will be to advise the Board on the 2013 Scoping Plan update. That update will focus on the implementation status of the measures that are in place to meet our 2020 goal. Those were part of the original 2008 Scoping Plan. There will also be a post-2020 element. That's what we would recommend that the Committee focus on, a very high-level strategy on how California will meet its 2050 goal.

BOARD MEMBER SHERRIFFS: If I can just add, you know, I think one of our concerns is to be sure that as we go forward disadvantaged communities are not further
disadvantaged in this work. Their perspective is important for many other reasons.

I also think it's important to get the perspective of what they those communities can contribute to this effort.

CHAIRPERSON NICHOLS: Yes. I agree. That's a very good point.

I might just add a little bit, because this is an area that I've spent quite a lot of time on with staff trying to figure out why our previous effort was not as successful as it should have been. Because honestly, I think everybody, both those who served on the Committee and those who worked with the Committee, felt that at the end of the day when we had so many members either deciding not to continue or actually actively opposing the Scoping Plan that the Board adopted, but we shouldn't have had to get to that point.

And I think it's clear that it's very important to have the charge right, as you say, so people have expectations coming in that are realistic and they know what they're signing up for.

It's also very important that we staff it properly and that people who are on the Committee feel that they're being given adequate access and information so that they can really give good advise.
And then also I think, as you're suggesting, I believe inviting them -- inviting the members to add to the charge if there are places where they feel like we could use some additional direction to be more responsive and effective, I think that's absolutely correct.

I'm really pleased that a couple of members of the old Committee chose to reapply, because I think that shows a good will on their part, and it will be nice to have a little bit of that historical memory. But it's also going to be great to have a bunch of new folks who are active in their communities but haven't been involved in this process before. So it's kind of a nice mix, I think.

Ms. Berg.

BOARD MEMBER BERG: Thank you, Madam Chairman. And just to follow up, I think that it's equally as important to provide information for the Committee within the scope of what we are looking at. Because there's some very tough issues. But they don't fall all under AB 32. And the Scoping Plan. And it gets very frustrating when you see an opportunity that you might be able to be heard on a criteria pollutant issue or another issue through this Committee and then we really -- it isn't the forum for us to act on that.

So I'm very pleased and happy that and commend
staff and thank you for your leadership on this, because I echo Dr. Sherriffs' observations this is critical. We need to engage these communities. We need their help. But we also need to provide them guidance so it can be a win-win situation.

CHAIRPERSON NICHOLS: Yes, Ms. D'Adamo.

BOARD MEMBER D'ADAMO: I would just echo Ms. Berg and maybe encourage staff to have information available so that they could point the participants into the right direction.

I've just found in my own tours on air quality issues in the valley with disadvantaged communities oftentimes issues come up that are very significant, such as water quality and availability and access to drinking water supplies that we don't have a direct role on, if any. So it would be I think important for staff to have information to provide to the participants as to other venues that they could go to in order to seek redress of those important issues.

CHAIRPERSON NICHOLS: Okay. Seeing no further comments and not having had any comments or questions from the audience, I would like a motion to approve the appointment, with the understanding that the Committee will be expanded and that an effort will be made to go out and recruit and hopefully with some help from our Board
members to do that.

BOARD MEMBER D'ADAMO: So moved.

BOARD MEMBER RIORDAN: Second.

CHAIRPERSON NICHOLS: All in favor please say aye.

(Ayes)

CHAIRPERSON NICHOLS: Opposed?

Abstentions? Okay.

And now we'll move on to the Governor's Zero Emission Vehicle Plan. Okay.

So I should say an introduction here that a year ago Governor Brown Executive Order directing California to, "Encourage development and success of zero emission vehicles to protect the environment, stipulate economic growth, and improve the quality of life in the state."

The long-term target of one and a-million zero emission vehicles on California's roadways by 2025 is in line with the program targets for our own zero emission vehicle program.

ARB's leadership in supporting zero emission vehicles and fuels is reflected in the tasks outlined in the zero emission vehicle Action Plan that was developed from this Executive Order. Staff have spent a considerable amount of time and effort helping to shape this plan. We're very excited about it.
And so would like to have an opportunity to hear some more about it. I want to welcome Wade Crowfoot of the Governor's Office of Planning and Research, who is going to help provide some of the background on this as well.

DEPUTY DIRECTOR CROWFOOT: Thank you, Chairman Nichols. Very good to be here today, Board.

As you know, the ARB has been leading on the issue of zero emission vehicles for over 20 years beginning with the ZEV mandate in 1990. It's gratifying to be here today and to be providing an update from the Governor's office on our recent progress.

As Mary indicated, a year ago this month, Governor Brown issued an Executive Order on zero emission vehicles that sets a series of milestones on the path towards 1.5 million zero emission vehicles on California roadways by 2025.

And you know, of course, that that number, 1.5 million vehicles, is very close to the zero emission vehicle mandate that your Board passed of 1.4 million vehicles on California roadways by 2025. So the purpose of the Executive Order that Governor Brown issued is to support the work that really your Board started with the ZEV mandate. And as I mentioned, it sets forth a series of milestones for 2015, 2020, and then 2025 to achieve
It's worth noting that this Governor, Governor Brown, has issued only a handful of Executive Orders since he took office. So that, to us, indicates the priority and importance that he puts on the acceleration of the ZEV market.

It's worth noting that in the Governor's office while we work to support CARB and Cal/EPA to meet AB 32, which of course is a 2020 target, much of our work focuses on the longer term target, the 2050 target, of reducing greenhouse gas emissions 80 percent by that time. And we've come to the conclusion that an essential part of meeting that target is electrifying transportation. Simply put, it's very difficult to meet the long-term 2050 target that achieves climate balance if we don't make a fundamental shift towards transforming transportation to become electrified. So, of course, the zero emission vehicle market and accelerating that market is a key piece of that work.

So I'll just provide a bit of a high level update from the Governor's perspective on where we're at, and I'll turn it over to my colleague, Analisa, who, of course, is the staff of yours at ARB.

So after the Governor issued the Executive Order in March of last year, we realized that in order to meet
these milestones that began in 2015, State government had
to come together across agencies to take a variety of very
specific actions to support market development of zero
emission vehicles.

ARB, of course, has been doing good work on ZEVs,
as I mentioned, for a couple of decades. But many
agencies and departments that are essential to the State
helping to accelerate the market had not yet been engaged.
So the Governor's office convened an interagency working
group to create a specific Action Plan, of which I think
you at this point have copies. This Action Plan was
intended to do a few things. One is to integrate again
departments and agencies that hadn't been involved before.
You may be surprised to realize that the Department of
Food and Agriculture, for example, plays an important role
in this work or that the Bureau of State Architect
actually can enable in its own way the market adoption of
zero emission vehicles.

So the Governor's Interagency Working Group is
really an effort to bring all of this disparate
departments and agencies together on a common plan around
very specific actions that State government should be
taking to support the zero emission vehicle market.
Within the Governor's office are clear. State government
does not sell vehicles, nor would we probably want to sell
vehicles. We understand fundamentally this is a private sector enterprise. Because this market is in its infancy, we realize the State government can take many actions to support the marketplace and consumer adoption of these vehicles.

So when you have a chance to look at the Action Plan, you'll see very specifically 119 specific actions that State agencies or departments will be taking. And importantly, each action is accompanied by designation of which lead agency is responsible for achieving that action in a time frame.

So this is not only a plan; it's really an accountability document, to hold ourselves accountable in state government to doing what we can to support market acceleration.

And we wanted to be as transparent as possible with industry, be it auto makers, infrastructure companies, utilities so our private sector partners would be aware of just what we're doing in State government to accelerate the market.

So I'm very happy to report that we have finalized this Action Plan as of December. We held a summit actually in this room, public summit, which involved over 300 stakeholders to get feedback and a draft of this Action Plan. So we view this very much as a
product of our both our state agencies, our local
governments, and our private sector partners.

And then since January, we have been rolling up
our sleeves and actually working towards the achievement
of the actions within the Action Plan. And if I had more
time, I would bore you with some very early areas of
success, be it on standardizing signage across the state
or actually achieving charging stations infrastructure
vehicles in our state fleet.

But I don't have that time, so I won't bore you.
Instead, I will turn it over to my colleague and your
staff, Analisa, to give a more detailed report.

CHAIRPERSON NICHOLS: Thank you so much.
(Thereupon an overhead presentation was
presented as follows.)

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH
CHIEF BEVAN: Thank you. Thank you, Wade. Good morning,
Chairman Nichols and members of the Board.

This morning, I will provide you with an overview
of the Governor's Executive Order on zero emission
vehicles and the resultant Action Plan for its
implementation.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH
CHIEF BEVAN: As Mr. Crowfoot described, the Executive
Order signed March 2012 lays out specific goals for the commercialization of ZEVs in California. Foremost is the goal to have 1.5 million ZEVs on California roads by 2025. To support the 1.5 million ZEVs, the EO calls for a ramp-up in infrastructure development to support one million ZEVs by 2020. This goal includes both plug-in electric chargers and hydrogen stations for fuel cell electric vehicles.

The EO calls for reaching cost parity for ZEVs compared to conventional vehicles by 2020. Achieving this goal will require aggressive volume increases and a portfolio of incentives.

Perhaps ONE of the most substantial goals in the EO is the commitment to incorporate ZEVs into the State fleet. The EO calls for ten percent ZEV purchases by 2015 and 25 percent by 2020.

The EO also calls for increased use of zero emission technology in heavy, duty applications, especially as applied to public transit and freight movement.

Finally the EO directs the State to pursue growth in economic investment in ZEV technologies, infrastructure, and related jobs.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH
CHIEF BEVAN: Following the signing of the EO, the task team of State agencies was formed to develop specific metrics and actions that the State would use to measure and achieve the goals of the EO as Wade mentioned. Starting with the core agencies like ARB, the California Energy Commission, and the California Public Utilities Commission, and the Department of General Services, the task team has grown to include all the agencies shown on this slide.

I think it is significant that when taking a careful and comprehensive look at what is needed from the State to support ZEV deployment so many agencies and programs are touched.

It is important to note also that the EO directed the State to work with its public/private partnerships, the California Fuel Cell Partnership, and the California Plug-In Electric Vehicle Collaborative in development of metrics and actions needed to implement the EO.

In addition to the Stakeholder Summit that Wade mentioned by way of process and public interaction, the Task Team carried out workshops with the California Fuel Cell Partnership and the Plug-In Electric Vehicle Collaborative to take comment and suggestions from their members.

--00o--
CHIEF BEVAN: In developing the Action Plan, the Task Team found it helpful to break down the recommended actions into one of four groups: Infrastructure and community readiness, consumer acceptance and outreach, transformation of public and private fleets, and growth and investment in jobs. In total, the Action Plan identifies 119 distinct actions over the four broad categories.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: Having outlined the EO and the process for developing the Action Plan, I'll turn now to highlights of the Action Plan, the items ARB is assigned and a number of key items assigned to other agency that are significant in their impact to ZEV deployment. The items assigned to ARB are shown in bold text in the following slides.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: The infrastructure and community readiness category includes actions focused on all ZEVs, including both hydrogen and plug-in vehicles. Under this category, ARB will implement automaker reporting for ZEVs and assist with the development of infrastructure needs assessments based on projected ZEV deployments.
Following on this is the commitment to ensure that as plug-in chargers and hydrogen stations are installed, they are reported to the national renewable energy labs alternative fuel station clearinghouse. Their database of alternative fuel stations is used by many mapping applications, and thus, helps drivers reliably find charging and hydrogen stations.

The Department of Food and Agriculture's Division of Measurement Standards is tasked with establishing new fuel station labeling standards and new metrics for informing consumers about fuel quantity and pricing metrics.

Next, Caltrans is working with agencies and stakeholders to standardize roadside signage that directs drivers to charging and hydrogen stations. They are also tasked with enabling the installation of signage to help drivers find fueling infrastructure.

Finally, we're helping to develop community readiness guide books, supporting regional readiness councils, and community planning efforts. To this effort, the Office of Planning and Research is driving development of a ZEV guidebook that will provide communities with permit streamlining recommendations, best practices, and background information about ZEVs.

--o0o--
Specific to hydrogen, the ZEV Action Plan puts a high priority on establishing the initial network of hydrogen stations needed to support commercial launch of fuel cell electric vehicles by the auto makers in 2015. The key action to accomplish this is re-authorization of AB 118 with a provision explicitly directing funding for hydrogen stations. Supporting the efforts of communities to become hydrogen fuel cell ready, the Governor's Environmental and Economic Leadership Award Program now includes an award to hydrogen infrastructure leadership.

Alameda Contra Costa County Transit District is the first recipient of the award for their zero emission fuel cell bus demonstration program, innovative transit, and public hydrogen fueling stations.

ARB, CEC, and the California Fuel Cell Partnership are tasked with working together to explore innovative financing options and ways to bring private investment into the picture.

Finally, the Action Plan calls for establishment of a permitting Ombudsman for hydrogen stations. This position may provide broader support for establishment of stations, but initially, it was suggested by stakeholders that a State point of contract for permitting assistance
would be helpful in accelerating station construction.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: Recommendations recording plug-in vehicle infrastructure were the most numerous of the actions listed in the Action Plan. Many of them relate to establishment of policies and regulations for the use of electricity as a transportation fuel. And most of these will be undertaken by the California Public Utilities Commission and are aimed at ensuring fair, safe, and reliable delivery of electricity to vehicles.

The actions that I want to specifically bring to the Board's attention include ensuring accessibility to public charging stations through standardization of connectors and uniformity such that all drivers can activate charging, regardless of the network providing the service.

Also, the Energy Commission and the ARB will work develop to together a statewide plan for plug-in vehicle infrastructure. This will help determine priorities, funding needs, and charger use behaviors.

Finally, in this early market, we have already learned that two areas of high priority for charging are multi-unit dwellings, like condominiums and apartments and workplaces. Providing support for installation of these...
two sectors is anticipated to significantly support the
market acceptance and use of plug-in vehicles.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: A second major Action Plan category is
consumer acceptance. These actions are aimed at raising
awareness and acceptance of electric drive vehicles to
further support the market growth of ZEVs.

The task team recognized the importance of
supporting re-authorization of AB 118 in this instance to
continue clean vehicle rebates offered by ARB.

The Action Plan also recommends participating in
consumer outreach campaigns that raise awareness about
ZEVs where stakeholders acknowledged that providing
opportunities to drive electric drive vehicles is very
important. It was also recommended that the State pursue
programs to increase the use of ZEVs in rental car and
share car fleets, providing customers with opportunities
to experience electric drive vehicles in longer duration.

The Action Plan recognizes the need to continue
educating the public about hydrogen and fuel cells as
well. Fuel cell information will be integrated into ZEV
outreach websites that are currently focused on plug-in
vehicles.

The Action Plan also directs ARB to expand ZEV
education to auto dealerships. I can say from my own experience, even car sales associates signed expressly to the sale of electric drive vehicles do not have all the facts about the technology, available incentives, or infrastructure. Any resources we can provide to dealerships should help make the ZEV purchase experience more successful.

Finally, ARB is tasked with better understanding user household and fleet preferences when it comes to ZEVs. It is envisioned this work will help identify barriers to consumer acceptance and strategies that are working successfully to promote ZEV up take.

CHAIRPERSON NICHOLS: Can I just stop you on that one for a second?

We have not historically worked directly with dealerships that I'm aware of, except perhaps in an enforcement role, which is not necessarily the best introduction. Has the staff got a plan for how you're actually going to implement that one?

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH CHIEF BEVAN: We do. I'll talk about that a little bit later in the other slides, and maybe we can have more conversation.

CHAIRPERSON NICHOLS: Sure. Thanks.

--o0o--
SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: The consumer outreach acceptance actions described here are largely supported by other State agencies. The Governor's office is taking the lead on supporting continuation of federal tax credits for the purchase of ZEVs.

The California Public Utilities Commission through their regulatory process will ensure that the full value of electricity credits earned by utilities under the Low Carbon Fuel Standard are returned to plug-in vehicle users.

Recognizing that access to high occupancy vehicle lanes has been an excellent incentive for the purchase of ZEVs, the Action Plan recommends supporting extension of the benefit to ZEVs beyond the 2015 sunset date.

Additionally, recognizing that the process to receive an HOV lane sticker can take quite some time, as drivers must wait until they receive their license plates and registration before they can even apply for the sticker, the Department of Motor Vehicles will explore ways to streamline the process for issuing stickers.

And DGS is working on developing a statewide policy to provide parking benefits to ZEVs at State-owned buildings and parking lots.

--o0o--
SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: One of the most substantial elements of the EO is the commitment to purchase ZEVs for the State fleet. The Department of General Services is tasked with establishing State fleet purchase rules for ZEVs and a plan for implementation within three years. They have already issued the rules and the plan for ZEV purchases by State agencies.

They are also working on establishing statewide purchasing contract for ZEVs. These pre-negotiated contracts are available to local governments as well, broadening the pool of government fleets that may take advantage of ZEVs. They will also explore pooling of planned ZEV purchases with local and federal governments as well as federal government agencies, as well as with other states to see if advantages may be gained from larger orders.

State fleets will also participate in near-term pilot projects incorporating ZEVs to demonstrate how electric drive technologies integrate into daily fleet applications. As you may be aware, the State's vehicle fleet is shrinking. State agencies are relying more ad more on rental car contracts to fulfill their car travel needs. To this end, the task team asked that the Action Plan reflect a commitment to make the State's government's
annual miles driven increasingly zero emission by
including ZEVs in the State's car rental contract. ARB is
exploring piloting that project.

On the broader scale, the Department of General
Services is exploring the use of car sharing as a solution
to the State's car-based travel needs, and the Action Plan
directs them to consider integrating ZEVs into such a
fleet management system.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: Looking ahead at the beginning stages of
heavy-duty use in zero emission technology, a number of
actions were developed that will encourage transformation
of these fleets as well. ARB will create a statewide ZEV
fleet users forum, a platform o bringing fleet managers
together to discuss ZEV applications, share data, and
support expansion of zero emissions technologies in
fleets.

On the transit bus side, ARB coordinated with the
California Fuel Cell Partnership to develop a road map for
commercializing fuel cell buses, which was recently
published. We expect to be able to use this and other
sources of data and input to develop amendments to the
zero emission bus regulations. We are scheduled to return
to the Board later this year with an update and amendments
to this regulation that requires the use of zero buses in the largest transit agencies in the state.

In support of electric heavy-duty vehicles, the Action Plans calls for the establishment of electricity tariffs for public transit, fleets, and freight applications that encourage electrification. Action is needed in this area because the demand charges applied to high electricity loads that would be generated by rapidly recharging heavy-duty vehicles battery packs.

ARB will also assess the need for incentive funding for zero emission trucks and the inclusion of infrastructure costs in that assessment and will work with other State agencies to develop strategies to accelerate medium and heavy-duty ZEV use.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: In addition to the actions aimed at commercializing ZEVs, the Governor's EO also directs us to consider a broader goal of bringing ZEV technology investment, development, and manufacturing to California, adding benefit to our economy. ARB is tasked with supporting funding for ZEV demonstration and deployment projects. Other state agencies geared towards economic development are tasked with conducting industry analysis, outreach, assisting with permitting and looking for
facility reuse opportunities, like Tesla's reuse of NUMI facility in Fremont.

The Action Plan also calls for developing pathways for knowledge transfer between national labs, universities, and industry to help foster ZEV technology development in California.

As a primary market for battery vehicles, the need to address battery recycling was highlighted in the Action Plan, which directs the Energy Commission to support new market opportunities for battery reuse and recycling.

The Employment Training Panel is tasked with implementing training programs to develop the workforce needed to support growth in ZEV-related businesses. They have already put in place training programs for electricians to learn how to install electric vehicle charging stations, and they have begun pilot programs to train auto dealer sales associates about ZEV technologies.

The Energy Commission has been providing workforce development funding to the Employment Training Panel for these programs through AB 118 program.

--o0o--

SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

CHIEF BEVAN: Finally, I want to close on the message this that Action Plan is a living document. The Task Team is
committed to meeting regularly to report on progress on the actions listed in the document and continue building cooperative relationships between the agencies.

The Task Team is also committed to updating the Action Plan at least annually. It is important to the Governor's office that we publicly report on progress towards the goals outlined in the EO.

That concludes my presentation. We're happy to answer any questions. Thank you.

CHAIRPERSON NICHOLS: Thank you very much. I really am pleased that we have the opportunity to update the Board on this project. I think if you serve on the Board for any length of time, you know how involved ARB has been in bringing the zero emission vehicles into reality and getting them now on to the dealers' floors. But that doesn't mean that they're actually flying out in the numbers that we would like them to. And it is clear that creating a new market is something that requires a lot of different elements. And the State is certainly not in a position to write down the cost to the point where it would be perhaps the easiest way to compete with the existing types of conventional vehicles. But there is a lot that we can do to make it easier for consumers to find these cars and to actually use them. So it's been just exciting to see how the State as a whole has really come
together around this goal.

    Wade did a terrific job, I think, of pulling that
together. Again, it's easy enough to issue an Executive
Order. All you do is write it up and say it shall be so.
But to actually make it happen in the real world is a
whole different order of magnitude. And he has stuck with
it and really put a lot of very solid meat on the bones of
the Executive Order.

    So as you can see, we have a lot to do with this.
But we also have a lot of help. I think that back page of
the Action Plan which lists some of the other resources
that are available with all those different web sites
attached to it is a pretty good reference point.

    I know those of you who are representing local
government on this Board have stories to tell about things
that are going on in your communities to facilitate the
introduction of zero emission vehicles because it's
actually amazing how much is going on here. But this is
at least a good illustration of some of the highlights of
it.

    Anybody have any comments? Yes, Professor
Sperling.

    BOARD MEMBER SPERLING: Yes.

    CHAIRPERSON NICHOLS: By the way, U.C. Davis is
the home of a major research center on zero emission
vehicles, which I think was initially seeded with a grant from the California Energy Commission. So there is relationship there, too.

BOARD MEMBER SPERLING: I do have this little moonlighting job as Chairman of the California Fuel Cell Partnership for this year, in addition to a few other moonlighting jobs.

CHAIRPERSON NICHOLS: With a lot of pay attached to it, I believe.

BOARD MEMBER SPERLING: I really do want to add to what Chairman Nichols said that this really is a very, very impressive Action Plan, and it's because exactly -- it is because of the follow up and identifying all these agencies and organizations that have all these tasks that are necessary for this to be a success.

So it really is very impressive what the Governor's office and Wade is doing in terms of actually turning a plan on paper into a real action, set of actions.

I did want to highlight one other related part to this that's not been mentioned. And I know it's become -- coming to the attention of our Board here and yourself as well, and that is we really need to worry about the rest of the country and especially the other states that have adopted the ZEV mandate along with us. And if you talk to
the car companies, they're very pleased with what
California is doing. They're impressed and pleased and
helping all the incentives and all the other actions we've
taken.

But that's not happening at the same level in the
other states. And if those other states falter as we go
forward, one that undermines the ZEV mandate just in terms
of a regulatory action, but much more so in terms of
creating that market, if the car companies don't have a
market for their ZEVs, that means the price of the ones
they do sell in California are going to be much higher and
much less committed.

And we're having discussions -- we're going to
have another discussion this afternoon about it
internally. But I just put this at highest priority that
we need to figure out what we can do to support those
other states. And we've got a lot of expertise. We've
got a lot of experts. We've got a lot of knowledge here.
And we're a big state. I add that. And we'll have to
figure out what exactly that means as we go forward. But
it just has to be a high priority.

CHAIRPERSON NICHOLS: Thank you.

Other questions or comments? Yes, Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: Great job. As the owner
of a zero-emission electric car, as I look around, it's a
no-brainer why isn't everybody doing it? But I understand there are a lot of barriers and the infrastructure, in particular, for people. It is a different mindset to take that step. But boy, we have no regrets. Very glad to have done it.

The time line, can you say a little bit more about the accountability? Are you responsible for running around to these agencies for the next three years and ensuring they're meeting their time lines?

DEPUTY DIRECTOR CROWFOOT: Short answer is yes. I'm fired if this doesn't happen.

We wanted to be very clear and hold ourselves accountable. So ultimately, it's the Governor's office that's responsible for convening this interagency working group. And we are, in turn, are holding each agency and department listed in this Action Plan as accountable.

Some of these actions are very tangible and achievable in the near term. Some are more multi-phase in the longer term. So if you have a chance to review the document, you'll see some are 2013 deliverables where we're confident we can actually get this done in 2013. Some are 2013 to 2015, recognizing that as a longer term process. But as Analisa mentioned, we are committed to providing a quarterly update to the public and to stakeholders on the progress that we're making.
I can tell you that there is very strong partnership both through the Fuel Cell Partnership and the Plug-In Vehicle Collaborative. We are in real time contact with both the auto makers, the utilities, and infrastructure companies, because we want them to know what we're doing so they can leverage our efforts.

CHAIRPERSON NICHOLS: Supervisor Roberts.

BOARD MEMBER ROBERTS: Just a question since it as an interagency effort. I'm curious and we're talking about infrastructure, it seems like the question always goes begging is what do you do when you have millions of these on the road and they're not paying for the fundamental infrastructure of the roads themselves? Seems like the longer that question goes unanswered, the more difficult it's going to be to resolve because you're going to then millions of people who feel empowered and feeling like they shouldn't contribute to the basic infrastructure.

DEPUTY DIRECTOR CROWFOOT: I think that's a very good point and a fair question.

And to the extent that the State or the country moves away from gasoline as it's primary transportation fuel, that's a question that we need to answer. Right now, the ZEV penetration is extremely modest, between one --
BOARD MEMBER ROBERTS: I'm aware of that.

DEPUTY DIRECTOR CROWFOOT: -- two percent. From our perspective, we don't want to disable or kill the market before it takes off.

But Supervisor Roberts, your point is a good one. We're actively thinking about what are alternative funding streams for transportation that aren't so directly linked only to gasoline.

BOARD MEMBER ROBERTS: So there is some discussion at someplace?

DEPUTY DIRECTOR CROWFOOT: Absolutely.

CHAIRPERSON NICHOLS: Yes. Actually, including within our own State Department of Transportation, because as we've been holding workshops on the use of the funds generated by the Cap and Trade Program, Brian Kelly, the Director of the Agency, has been sitting with us. And somewhat ironically I suppose, but they're looking potentially to be part of a coalition that would help secure funds from cap and trade for a variety of different transportation-related programs, including some element of road maintenance as a part of that. It's an interesting switch in thinking about it.

BOARD MEMBER ROBERTS: I'm actually delighted to hear that. Thank you.

CHAIRPERSON NICHOLS: Okay. This is just an
informational item. So you are now informed. You're all part of it. And --

DEPUTY EXECUTIVE OFFICER AYALA: I think I'd like to share with the Board a follow-up in response to Dr. Sperling's point. I think it's very relevant and very important.

We also share the concern about the uptake of technology in the northeast states. And we are implementing new actions so that we can re-energize the ZEV alliance that the Board has had with those states for many years.

And just so that you know, one of the ideas that we are contemplating and actively pursuing is the concept of those states developing Action Plans similar to what we've done and that you just heard about. Specifically for the reasons that Professor Sperling pointed out that we want to make sure that we are tracking. We want to make sure that we are helping. We want to make sure that we are engaged in what is happening, not only in California, but also and perhaps most importantly, outside of California, because we absolutely need the economies of scale that are going to be accomplished only if we develop a national and international market, because that's going to help us here with the cost of technology.

And it's also going to be critical because, as we
all know, the ZEV mandate is already becoming an important point in discussions with industry, discussions that have been very positive thus far.

So I just wanted to respond to Dr. Sperling and share that point with the Board.

CHAIRPERSON NICHOLS: Thank you. I've neglected to call on the one person who signed up to speak on this item. So I'll do that now.

Bonnie Holmes-Gen.

MS. HOLMES-GEN: Thank you, Chairman Nichols and members.

Bonnie Holmes-Gen with the American Lung Association of California. And I'm pleased to be here. I just wanted to briefly state our great appreciation for the work of the Governor's office and your Board and bringing forth this ZEV Action Plan and all the coordinated efforts that are going on to promote zero emission vehicles in California. As you know, we are completely committed to the drive to transform our vehicle fleet in California. And we believe a successful launch of ZEV technology it a critical public health measure that will help to improve public health, reduce asthma attacks, and chronic illness from air pollution.

And we are supportive of all the strategies that are brought forward today, particularly the need to expand
consumer awareness, to promote ZEV readiness and leadership at the local government level, to reduce up-front cost for ZEV technologies, and to support medium and heavy-duty ZEV technologies.

And want to particularly make a couple comments. Number one, this issue of the dealership and the need for consumer education at the dealership I think is a really important issue. I've heard about some promising efforts starting to educate dealers, and we want to hear more about this. I think that's a real priority issue, especially with a few stories I've heard from people who have visited dealerships and had unfortunately not the best experience.

Just also want to comment, of course, we're really pleased to be co-sponsoring SB 11 by Senator Pavely and AB 8 by Assemblymember Perea and Skinner. And we're really pleased the continuation of these incentive funding is going to make a big differences in continuing to incentivize consumers who are buying ZEV technologies and incentivizing the whole range of deployment of ZEV technology.

And third of all, I wanted to also just mention this area of medium and heavy-duty is a very important area to us. I'm really pleased that you've called that out. That's an area where we're very anxious to see a
separate plan of action as to how we're going to increase deployment in the freight sector. I know that you've got some meetings coming up in that regard, and we're going to participate. And we're really pleased you're looking more closely at how we can expand in that area.

So thank you so much for all the hard work on this. And we, of course, look forward to continuing to partner with you in this effort.

CHAIRPERSON NICHOLS: Great. Thank you, Bonnie.

Supervisor Serna.

BOARD MEMBER SERNA: Thank you, Madam Chair.

I note in the Executive Order that there is mention of obviously the need to protect the environment by successfully developing zero emission vehicle structure infrastructure for the State, but there's also a mention of the economic benefit of doing that.

And I wonder to what extent have we collectively, all the agencies that are mentioned at the back of the report, beginning to reach out the regional Chambers of Commerce, not just the auto industry, but economic development organizations.

I can tell you for a fact that here in Sacramento there is a real genuine interest. In fact, you'll read about it in today's Sacramento Bee, in diversifying our local economy to not just be reliant on State government.
This is, to me, a shining example of some real promise for developing new technologies here in our own backyard and other places around the state. I'm just wonder out loud what have we been doing, what can we do better to promote the economic benefit of this endeavor?

DEPUTY DIRECTOR CROWFOOT: Supervisor, I would call it a work in progress.

The fourth area of the Action Plan is focused on building investment in jobs. So we have actively -- active partner in this is the Governor's Office of Business, or GoBIS, for short. Actually, they have a CalBIS development team that seeks to keep businesses in California and attract new ones in California.

So we are conducting a supply chain analysis of both hydrogen fuel cells and electric vehicles to best understand really where are we most well positioned to bring component manufacturing into the state, for example. So we're really working to do the analysis to identify where we can build.

I think your suggestion around outreach to regional business organizations is a good one. We haven't done frankly enough of that. So that's a suggestion that I'll take back.

I will note that there is a fair amount of manufacturing and research and development for both
electric vehicles and fuel cell vehicles happening in California. If you look at the number of patents pulled, for example, on hydrogen, California overwhelmingly is the place where this innovation is occurring.

So the short of it is we are hopeful in the next couple of years we have real success stories in different parts of the state where we can demonstrate that acceleration of the market is building real jobs.

BOARD MEMBER SERNA: Thank you.

CHAIRPERSON NICHOLS: Thanks so much. Thanks, everybody. Look forward to continuing to be updated on the progress. And I'm sure individual Board members will continue to have ideas and questions as we go along as well.

The next agenda item is an update, just another informational item, on the Truck Loan Assistance Program. When the Board approved the in use truck and bus and tractor trailer greenhouse gas rules in December of 2008, we committed support for a comprehensive financial assistance program to help effected fleet owners upgrade their trucks ahead of regulatory requirements.

The Truck Loan Assistance Program is one component in our portfolio of approaches for aiding the truckers, and it's specifically designed for small fleet owners who may face challenges in financing their truck
upgrades in order to comply with the rule.

Today, we're going to hear about this program and its successes and its outlook for continuing into the future.

I want to point out that this program exemplifies a successful collaborative effort with the California Pollution Control Financing Authority. So I'm pleased to welcome Mike Paparian, who is Executive Director of the agency, who is going to join our staff to update us on the program.

Mr. Goldstene, would you please use this item?

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

Approving the truck and bus and tractor/trailer greenhouse gas regulations, the Board committed support to ARB's comprehensive financial assistance portfolio on truck upgrades ahead of compliance schedules.

The portfolio's program specifically designed for truckers include the Carl Moyer Program, the Proposition 1B Goods Movement Emission Reduction Program, and the AB 118 Truck Loan Assistance Program. Together, these programs have provided more than $640 million in funding assistance for truck upgrades.

Today, we'll update you on one component of ARB's financial assistance for the portfolio, the Truck Loan
Assistance Program known as PLACE, or providing loan assistance for California equipment.

This innovative funding tool is a first for ARB and is a mechanism to stretch our limited incentive dollars. To augment ARB's traditional grant programs, ARB partnered with the California Pollution Control Financing Authority to utilize its California Capital Access Program model to provide financing to small business fleet owners for truck and trailer upgrades.

Since the first loan was enrolled in the program in June 2009, ARB funding has provided about $23 million in reserve funding to private lenders, which, in turn, have provided approximately $150 million in financing to small business and minority truckers working in California. What that means is that we're getting about a six-to-one leverage of public money to private capital.

I'll now ask Krista Fregoso of the Mobile Source Control Division and Mike Paparian, who the Chairman just introduced to talk about the program. Krista.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST FREGOSO: Thank you, Mr. Goldstene.

Good morning, Chairman Nichols and members of the Board.
Today's update on the Truck Loan Assistance Program will be a joint presentation with the California Pollution Control Financing Authority, known as CPCFA, to reflect our agency partnership in implementing this innovative financial assistance program for truckers.

First, I will provide a brief program overview describing our partnership with CPCFA, the program structure, and its success to date.

Next, Mike Paparian CPCFA's Executive Director, will provide an update on the demographics of truckers using the program, funding projections for the remainder of the year, and a program adjustment CPCFA will soon implement.

--o0o--

AIR POLLUTION SPECIALIST FREGOSO: The Truck Loan Assistance Program, officially known as the providing loan assistance for California equipment program, or PLACE, expands ARB's portfolio of air quality incentive programs to assist truckers working in California.

Developed as one component of ARB's comprehensive funding assistance program to support the in-use truck and bus and tractor/trailer greenhouse gas rules adopted in December of 2008, the Truck Loan Assistance Program is the first of its kind for ARB by shifting the funding mechanism from the traditional grant program to a
financing assistance program. I'll explain this program structure more in the next few slides.

Assembly Bill 1338 signed in 2008 provided the basic framework for the program and allocated first year funds from the ARB's AB 118 Air Quality Improvement Program, called AQIP, for the program start-up. You'll hear more about AQIP during the next Board Item.

With just over 30 million available funding, staff set forth designing a program to provide small business owners with access to affordable financing for the purchase of newer, cleaner trucks, ARB-verified diesel exhaust retrofits, and SmartWay aerodynamic technologies that improve fuel efficiency and reduce greenhouse gas emissions.

--o0o--

AIR POLLUTION SPECIALIST FREGOSO: Staff began their partnership with CPCFA in 2008 to develop a Loan Assistance Program targeting small fleets in need of financing for truck upgrades ahead of regulatory compliance schedules.

By partnering with the CPCFA, ARB was able to quickly and efficiently develop a Loan Assistance Program utilizing CPCFA's proven financial assistance model, the California Capital Access Program, or CalCAP for short. In its legislative authority to implement, the CalCAP
model aids small businesses that fall just outside lenders' standard loan underwriting criteria, including those that may not qualify for conventional financing in California's volatile economic climate and tight credit market.

With the basic program structure already established, ARB and CPCFA tailored a program for a prompt startup in April 2009 to meet the specific needs of the small business trucking sector.

ARB provided CPCFA just over $30 million to administer the Truck Loan Assistance Program through the end of 2013. As you will hear from Mike Paparian later because of the success and popularity of the program, currently available funding will likely deplete by June.

To help address this shortfall, staff will be proposing as part of the next agenda item to transfer about $4 million of available AQIP funding to the Truck Loan Assistance Program to help extend it through the summer.

--o0o--

AIR POLLUTION SPECIALIST FREGOSO: I'll now briefly discuss the benefits of the CalCAP loan assistance model.

First, by reducing the financial risk to lenders, it enables lenders to provide loans to small businesses
that may not qualify for traditional loans and that are having trouble obtaining financing.

In our program, ARB funds are set aside in the lenders' loan loss reserve accounts, as loans are enrolled. In the next slide, I'll describe more how it works.

But providing lenders a comfort level to expend their target borrower pool, loan assistance creates new opportunities for small businesses truckers to access financing in order to upgrade their fleets.

Finally, for every dollar we spent in the form of loan assistance, participating lenders have provided about $6 1/2 in financing to a trucker.

--o0o--

AIR POLLUTION SPECIALIST FREGOSO: Each time a loan is enrolled in the program, ARB funds are deposited into a lenders' loan loss reserve account as a form of loan portfolio insurance. The more loans a lender makes, the more dollars are deposited into its loan loss reserve account to cover potential losses resulting from loan defaults.

At the program's inception in 2009, ARB contributed 14 percent of each enrolled loan amount into a lender's loan loss reserve account.

In 2010, ARB authorized CPCFA to increase the
contribution rate to 20 percent on the next $5 million in
loan volume for each participating lender. This change
encouraged new lenders to participate in the program and
couraged more loans to the trucking sector, severely
affected by California's economic climate and tight credit
market.

At the end of January, five of the most active
lenders in the program each surpassed $5 million in loan
volume. Participating lenders set all interest rates and
terms and conditions of the loans as well as decide which
loans to enroll in the program.

In addition, eligible borrowers must meet the
CalCAP's small business requirements, which align with
ARB's goal to provide more funding opportunities for
smaller trucking fleets.

This means that a trucking company must have 100
or fewer employees, have a primary economic impact in
California, and adhere to an average annual revenue cap.

--o0o--

AIR POLLUTION SPECIALIST FREGOSO: This slide
presents the program's achievements through January.
Since the program's inception in mid-2009, nearly 23
million in program funding has been leveraged to provide
just over $148 million in financing for the purchase of
nearly 2600 cleaner trucks, exhaust retrofits, and
trailers.

The lenders participating in the program include a mix of traditional banks, credit unions, community development financial institutions, and truck finance lenders. Together, these lending institutions have provided a range of access points throughout California to finance truck upgrades in nearly 80 percent of California's counties.

Looking ahead, there is a continued program need to assist at least 30,000 trucks in small business fleets that will require upgrades over the next two years.

--o0o--

AIR POLLUTION SPECIALIST FREGOSO: Let's now move on to program demographics and funding projections. We are very pleased that Mike Paparian, Executive Director of the CPCPA, has joined us the today to provide that update. I'll turn the remainder of the presentation over to Mike.

MR. PAPARIAN: Thank you, Krista.

I'm Mike Paparian, Executive Director of the Air Pollution Control Financing Authority. We've been around since 1974. March 7th, 1974, as we just celebrated our 40th birthday as an agency helping in a variety of ways to assist with financing in the environmental and small business areas.

You actually know one of our former staff, James
Goldstene, in the 1990s was one of the folks who worked in the California Capital Access Program.

With me today at the end of the table here is Nancy Trombly, the Manager of the CalCAP Program.

So you asked us -- the ARB asked us to work with them a few years go to come up with a program that would meet various goals in assuring that small business truckers who are affected by your rules who were complaining that they were not going to be able to get into new trucks and not going to be able to get the financing for new trucks we could overcome those obstacles working together with this program that we developed in conjunction with the ARB.

I'm very pleased to report the results of the program. It's been very successful. I think it's met all of our expectations, and then some.

As you can see from this slide, 79 percent of All enrolled rolled trucks are to owner/operators of one truck. That means that these are truly the small business truckers that are benefiting from it.

Ninety-four percent of the loans went to companies with ten or fewer employees. So you do have some additional ones that have just a handful of trucks.

Eighty-six percent of the trucks financed are used, but these are the newer used trucks that meet your
air quality requirements.

Eighty-seven percent of the borrowers are minorities.

Number of jobs created or retained through the program, 3,345 jobs created or retained. And then it's kind of an ancillary jobs benefit, we know anecdotally from our lenders about 30 or so staff have been added to lenders to participate, so the lenders could participate in this program.

--o0o--

MR. PAPARIAN: How does the program work? Krista described it. But basically, the borrower approaches a lender. The lender makes the loan, makes a decision about the loan. They enroll the loan in CalCap. We then provide the portfolio insurance, the contributions that Krista talked about previously.

The program growth, next slide.

--o0o--

MR. PAPARIAN: You'll see there has been a steady growth. And you'll see that in 2010 there were a large number of loans in two quarters in 2010. This related to some of your compliance deadlines and a lot of truckers at that point doing retrofits.

Since that time, we haven't seen the retrofits, but we've seen a steady increase in the usage of the
program for the purchase of new or newer trucks.

As of January 29th, you can see that we had 141 loans so far this year. I can report as of this week we're up to 352 for this quarter. So we're going to continue this growth curve that you're seeing where we have more and more loans enrolled every quarter. We're very pleased with the acceleration in the program demand, but this presents a funding challenge, which I'll describe in the next slide.

--o0o--

MR. PAPARIAN: So as we enroll more trucks, we have less funding available for the program. As mentioned earlier, ARB has provided slightly more than $30 million to implement the program through December under the current interagency agreement. We've used most of that funding. As of January, we had about $6 million left. All of this week, we have about $4 million left in funding.

Based on the latest activity trends, we're estimating that the remaining funds will be depleted -- this slide shows by the May/June time frame, and that seems to be right. Sometime in the May/June time frame, we would run out of funds, and we would have to curtail the program at that point without any additional funds.

--o0o--

California Reporting, LLC
MR. PAPARIAN: So we've done some projections in the next couple slides, you'll see. To implement the program through 2013, as is, without any program adjustments, we estimate about $11 million in additional funding is needed. And "as is means" the program retains the 20 percent and 14 percent loan loss reserve contributions discussed earlier.

The program successes depend not only a demonstrated demand by truck owners, but also on our partners in the lending community who have requested our resources in developing the program to best serve the small business trucking community. So without additional funds to extend the program, the program is projected to end in the May/June time frame.

--o0o--

MR. PAPARIAN: So $11 million could carry it as is through the rest of the year. We could make some program adjustments. We've talked quite a bit to participating lenders about the impacts of various adjustments we could make to the program. If we reduced this loss contribution to ten percent, we would reduce the needs in funding to around 7.8 to $8 million through the rest of the year.

We believe the lenders would continue to serve a comparable community of truckers that we wouldn't see a
big drop-off in their ability to make loans to the trucking community.

Below the ten percent contribution, what they're telling us, is they would have to start reducing the number of -- basically cutting out at the margin the truckers that would qualify for loans. And you would see some of the truckers who have poorer credit risks or poorer credit histories not being able to get the financing for trucks.

--o0o--

MR. PAPARIAN: The next slide simply shows if we were able to add $5 million -- and that's in your next agenda item -- we're projecting that the program would continue to the August/September time frame with the $4 million that you'd have discussed in the next slide.

So the next slide --

--o0o--

MR. PAPARIAN: -- just in summary, program has been a great success. We've been very happy with it. We think we've met our joint expectations for the program. The demand for the program is continuing to increase somewhere in 8 million to $11 million range would be needed to continue the program in a comparable fashion through the end of this year.

And then for 2014 and beyond, we would entertain
and welcome discussions about how we can continue the program into 2014 and beyond. The $19.4 million you see in that slide would be the projection if we were to continue the program as is in 2014. And if there were lesser funds available but a desire to continue the program, we could work on how that could work out.

CHAIRPERSON NICHOLS: Just in case anyone hasn't read ahead on the agenda, the very next item is going to be a proposal by the staff for how to deal with this shortfall situation. So you can hold questions on that I think, although it would be good to just clarify what the source of the funds has been up until now. What pot of money did this come out of?

MR. PAPARIAN: The startup funds for this program came from the very first year of the Air Quality Improvement Program, the AB 118 Air Quality Improvement Program.

CHAIRPERSON NICHOLS: The same program we've been talking about the need to re-authorize was the basis for this. And I don't think there is any question this has been enormously successful, has leveraged a tremendous amount of air quality improvement for a relatively modest sum of money, all things considered. Not to mention dealing with a particular population of truck owners who are clearly going to be the most heavily impacted
financially by our regulations. So it's something that we
would certainly want to try to replicate.

We do have one witness who signed up for this
one. Nidia Batista.

MS. BATISTA: I do have a comment on this item
I'd like to share. If you'll indulge me, I wanted to make
a quick little presentation as well.

On this item, I wanted to say we've been strong
cheerleaders of this program when CARB first initiated it
and would like to continue to be.

So I was going to ask what can we do to help to
make sure this program moves forward and continues to be
effective. And we look forward to working with staff and
getting more of the details I just shared. Unfortunately,
I walked in midstream, so I didn't get to hear the full
presentation. But we want to make sure this program moves
forward.

Chair Nichols, as you mentioned, this is serving
a population that perhaps wouldn't otherwise get served.
And as it comes to incentives, our organization, which I
should mention I'm with Coalition for Clean Air, statewide
air quality advocacy organization. Traditionally, we are
certainly are supportive of incentives, but not for the
use of compliance.

The one flexibility we see and the thing we have
supported is, in fact, making sure when it comes to financing that financing can, in fact, be used for compliance. In that regard, we would like to see this program grow. And we would like to congratulate you and applaud you and let you know we want to be helpful. We see this as a wave of the future with limited public resources. We want to maximize their use and maximize their reach. And financing certainly is one area where we can provide that.

CHAIRPERSON NICHOLS: Thank you. We appreciate your coming forward.

MS. BATISTA: And if you just indulge me, I'm concerned I may not be here for the rest of the meeting. I just wanted to thank Board Member D'Adamo for her services and her years here on the Board. It's a little off topic on this item. Over the years, we've not always agreed on things. But she's been definitely demonstrated an openness and a willingness to engage in dialogue. And it's been really, really appreciated.

And actually, I think for the most part have agreed on most things. It's been really great. And her role as a leader for the region, San Joaquin Valley, and as a state, we're just really excited. We wish her well on the Water Board and want to continue to maintain communication and contact.
And as many of you on the Board have demonstrated your vocal talents, we'll continue to tap those from her as well. That's referenced to our annual toast event we many of you have participated in.

So I just wanted to share this gesture of gratitude to you, Board Member D'Adamo.

BOARD MEMBER D'ADAMO: I'm very touched. Thank you so much.

I've really appreciated our relationship through the years and look forward to continuing to work with you.

CHAIRPERSON NICHOLS: And compliments and presentations of flowers are always in order.

BOARD MEMBER BERG: If staff could help me. This is a Loan Assistance Program, and so our dollars are going to the lenders to help them offset the risk of default. So this money then is being used or tapped if, in fact, the loan is defaulted or is it also to reduce the interest rate to, A, maybe somebody that would normally have a very high interest rate because of their credit situation?

MR. PAPARIAN: It's a little bit of both. So you know, the primary purpose is to reduce the risk to the lenders. So in reducing the risk, what we've seen is that lenders as they become comfortable with the program and recognize their risk has been reduced, do have a tendency then to accept loans that they wouldn't otherwise accept.
and accept them at a lower interest rate than they would otherwise. But it's not a direct interest rate subsidy. It's a risk reduction strategy. Again, reducing the risk, they are able to reassess their ability to put loans out at different interest rates.

BOARD MEMBER BERG: What is the current default rate?

MR. PAPARIAN: So as of this week, we have had 24 claims on about 2400 loans. But you know, to be very honest, it's a somewhat deceptive number in that it usually takes a couple of years before you start seeing the defaults. And the bulk of our loans have been made in the last year and a half. So we would expect to see an increasing number of defaults over the next couple years.

BOARD MEMBER BERG: What would be the industry standard as a percentage in a default rate?

MR. PAPARIAN: I'll ask Nancy or --

EXECUTIVE OFFICER GOLDSTENE: Half a percent to one percent.

MS. TROMLY: Industry standard would be about one percent, which is where we are now.

BOARD MEMBER BERG: That's where we're running now.

MR. PAPARIAN: Yeah. But it will increase. And that's -- but we're intending to reach into a riskier
marketplace, too.

BOARD MEMBER BERG: At the end of the day, I'm trying to assess if this money that is sitting there, if they don't use it, if it isn't needed for default or/and reducing interest rates not in a subsidy but however you characterize it, is it our money coming back?

MR. PAPARIAN: Yes.

CHAIRPERSON NICHOLS: Good question.

Mrs. Riordan, did you have a question?

BOARD MEMBER RIORDAN: Just to follow along, it comes back you can reuse it; correct?

MR. PAPARIAN: So for the lenders out there right now, the typical lender that's been in the program for a while has about 18 percent or so of their outstanding loan balances in the loan loss reserve. If they have a million dollars in loan balances, they have 180,000 in their loan loss reserve account, as an average. So they are happy that it's there because a few loans could deplete that loss reserve account.

But as those loan balances come down that the balance in the loan loss reserve account with comparison to the outstanding loans goes up. When it exceeds 100 percent, then you know they're more than covered, but there are loans outstanding. And I think at that point we would have some discussions about whether to retrieve some
of those funds, or if they decided to exit the program, or all their loans were paid off, that's the point at which we would retrieve those funds on your behalf.

BOARD MEMBER RIORDAN: But they have potential to be reused if we were to retrieve them back for new loans. I know that's not quite how it happens. But theoretically speaking, maybe there will be a day when some of these moneys --

MR. PAPARIAN: Into the future, yes. But right now, it's serving as essentially a portfolio assurance. If we were to retrieve funds now --

BOARD MEMBER RIORDAN: I don't know how long those loans are usually for what -- I have not bought a truck, so I don't know. What is the time frame?

MS. TROMLY: They're typically four to five years.

BOARD MEMBER RIORDAN: Four to five years. And in theory, maybe if we think the economy is getting better in California, maybe, just may, be the loan default rate would go down. I mean, if a trucker is -- or the truck owner is utilizing that truck on a very regular basis, the opportunity to not default is good, we hope anyway; is that right? You're smiling.

MR. PAPARIAN: It's a very difficult one to deal with because where this program is benefiting truckers the
most are the truckers who have had challenging credit histories or, quite honestly, are coming off the cash economy and getting into a situation where they have a loan for the first time. It's very hard to predict what kind of credit challenges they're going to have going forward. The industry as a whole ought to be doing better as the economy improves. But the individual truckers who are out at the margin and are having challenges getting a loan anyway, very hard to say whether or not --

CHAIRPERSON NICHOLS: Sadly, I think what we learned during the worst of the recession was that there was a lot of consolidation going on in that industry and people getting pushed out who have been small owner/operators, too.

I mean, we want to be as helpful and supportive as we can. And I think there probably is a niche there for them. But it seemed pretty clear a lot of folks were losing their businesses because of the economy and also because they didn't have family members who wanted to take them over. They were getting out of the business because it just wasn't very profitable. They have other opportunities that were better. So it's hard to know how this is actually going to all shake out.

But I think it's very important to keep our eye on the price, which is a lot of newer trucks out there
being driven around that otherwise would not have been
driven, and some really polluting older trucks that are no
longer on the road.

BOARD MEMBER RIORDAN: But my hope would be as
the economy improved and their opportunities for loads or
whatever work that truck was doing would keep them going.

CHAIRPERSON NICHOLS: I hope so. And of course,
we would all like to see the people repay their loans,
right? It's the right thing to do.

We have another item which relates to this --
yes, one more.

BOARD MEMBER SHERRIFFS: I had a couple
questions.

One question involves qualifications for
people -- businesses that would be applying for this.
One, you talked a little bit about the CalCAP
requirements. I'm wondering where the requirement come in
terms of what percent of time the truck has to be
operating in California in order the qualify for this.
Where that piece comes in, whether it's in the
legislation, or it's our rule.

MR. PAPARIAN: It's our requirement that a
majority of the business be done in California. So 51
percent or more of the business be done in California.

BOARD MEMBER SHERRIFFS: The other question
just -- so this increasing demand, wondering about your thoughts about why that's happening now. Is it because of the program or the regulations are tightening up because the economy is improving? All of the above?

MR. PAPARIAN: I think it's a bit of all of the above. I think it's a bit of as the lenders have gotten more comfortable with the program and as their loss reserve accounts have grown, they're seeing a greater ability to enroll more and more loans into the program. It took them a while to get used to the program.

Once they got used to it and saw that they could reach out to borrowers they hadn't reached out to before, they started doing more and more of it. And we have a variety. We have lenders reaching from original equipment manufacturers. We have a small bank in Fresno. We have all kinds of lenders involved in the program.

BOARD MEMBER SHERRIFFS: I'm sorry. That 51 percent rule comes from us? You? The legislation?

MS. TROMBLY: That comes from the CalCAP regulations?

CHAIRPERSON NICHOLS: Any other questions? If not, let's thank you so much for coming. We really appreciate it. Always go to hear a good news story. And this partnership has been very valuable. So the fact that James Goldstene spent some time over there undoubtedly
helped. Makes us all aware of the opportunity.

We are going to move onto the issue of reallocating some of our funding within this fiscal year that came to us through AB 118, the AQIP program we've just been talking about. So far, our investments out of this program have supported a number of different priorities, including the deployment of hybrids, advanced clean cars, and other advanced technologies critical to meeting our long-term air quality and climate change goals. All of these investments are important to us and moving on the fundamental transformation of our vehicle fleet to one with widespread use of zero and near-zero emission vehicles.

Today's report is going to focus on some of the program's successes to date and is going to also recommend one reallocation of available funding. So Mr. Goldstene.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

AB 118, signed into law in 2007, created the Air Quality Improvement Program, or AQIP, which provides ARB between 30 and 40 million annually through 2015 to invest in clean vehicle and equipment projects to reduce criteria pollutants, air toxics, and greenhouse gas emissions.

AQIP expands our portfolio of air quality incentives, providing the opportunity to fund projects not
covered by other incentive programs which focus on near-term emission reductions from fully commercialized technologies.

AQIP is ARB's only incentive program structured to enable investments in technology-advancing projects that can provide immediate emission reductions.

Additionally, in the first year of the program, one-time funding was directed by the Legislature for use in establishing the Truck Loan Assistance Program to aid small business truck owners affected by ARB's end use and bus regulation and the tractor/trailer greenhouse gas regulation.

As we just heard in the previous item, this program has been highly successful in providing loans to small trucking businesses, but that current funding will lapse by summer.

On June 28th, 2012, the Board approved the AB 188 AQIP funding plan for fiscal year 2012-2013. As with previous years, the funding plan allocated funding for three projects: The clean vehicle rebate project; the hybrid and zero-emission bus and truck voucher project; and advanced technology demonstration projects.

The 2012-13 funding plan identified contingency measures as well that allowed the Executive Officer to reallocate funding between these projects as needed.
To date, demand has not exceeded funding available for the hybrid and zero-emission truck and bus voucher project, and roughly three to four million dollars is available which can help close the funding gap between fiscal cycles for other projects that have seen recent increases in demand.

However, because the Truck Loan Assistance Program is not one of the three projects funded this year, program funds currently cannot be reallocated by the Executive Officer.

Therefore, staff is requesting Board delegation to the Executive Officer to reallocate available funds from the hybrid and zero-emission truck and bus voucher project to the Truck Loan Assistance Program.

Lisa Macumber from the MSCD will update you on the program and the recommendation. Lisa.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST MACUMBER: Thank you, Mr. Goldstene.

Good morning, Chairman Nichols and members of the Board.

You heard the good news in the previous presentation; the Truck Loan Assistance Program has grown much more rapidly than anticipated, and staff expects the
increased activity to continue as compliance deadlines approach. However, additional funding is needed to extend the program at least through the summer.

Today, I will present staff's recommendation to grant the Executive Officer the authority to reallocate some limited funding from the Air Quality Improvement Program, or AQIP, to the Truck Loan Assistance Program.

I'd like to note today's proposal is only to address a short-term funding opportunity for the Truck Loan Program.

In June, staff will return with the proposed fiscal year 2013-2014 AQIP funding plan for your consideration, covering the sixth year of the program. At that time, staff will present a more comprehensive review of the AQIP and provide recommendations for future program investments.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: AQIP was created by Assembly Bill 118 signed in 2007 and is one of three incentive programs created under the bill. The other two programs are administered by the California Energy Commission and the Bureau of Automotive Repair. The Energy Commission focuses on vehicles, fuels, and infrastructure, and the Bureau of Automotive Repair funds early vehicle retirement.
AQIP receives up to $35 million each year from a variety of fees through 2015 to pay for clean vehicle and equipment projects designed to reduce criteria pollutants and toxics with concurrent climate change benefits. AQIP has the unique focus as ARB's only incentive program that allows for investment in mobile source technology advancing projects that are critical to meet California's post-2020 air quality and climate change goals.

AQIP expands ARB's portfolio of air quality incentives that generally focus on near-term emission reductions from fully commercialized technologies, such as the Carl Moyer Program, Lower Emission School Bus Program, and the Goods Movement Emission Reduction Program.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: As summarized in the previous presentation, in fiscal year 2008-2009, the Legislature provided a one-time allocation of roughly $30 million to launch the Truck Loan Assistance Program.

Beginning with fiscal year 2009-2010 and each year thereafter, staff has brought the Board a funding plan developed with public input that identifies proposed project categories and corresponding funding allocations. The funding plan also describes eligibility and selection criteria and describes how projects will be solicited and administered. Annual funding plans change from year to year.
year to reflect current priorities and public input.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: Since the program's inception, AQIP investments have focused funds in three core projects: The Clean Vehicle Rebate Project, which provides rebates of up to $2500 to purchasers of light-duty, zero emission, and plug-in hybrid vehicles; the Hybrid and Zero Emission Truck and Bus Voucher Incentive Project, which provide vouchers for approximately half the incremental cost of hybrid and zero trucks and buses for California fleets; and advanced technology demonstration projects that focus on vehicle and equipment projects that are not yet commercialized. These early investments in clean cars, truck, and other advanced technologies are critical for long-term transformation to a zero emission transformation future.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: Last June, the Board approved the fiscal year 2012-2013 funding plan. That plan allocated $18 million for the clean vehicle rebate project, $10 million for the hybrid and zero-emission bus and truck voucher incentive project, $2 million for advanced technology demonstration projects. These investments brought cumulative total project amounts to just under $50 million for clean car
rebates, $64 million for hybrid and zero-emission truck vouchers, and nearly of $6 million for demonstration projects.

In addition, the Board approved several program refinements to stimulate near-term demand for hybrid and zero-emission trucks. Refinements included: Increasing vouchers for the cleanest technologies available and adding new eligible vehicle types.

As a result, participation in the program is slowly beginning to increase. Demand for clean passenger vehicles has been increasing quickly. To ensure near-term demand for projects could be met, the Board included flexibility for the Executive Officer to reallocate up to $10 million from the current year hybrid and zero-emission truck voucher funds to other projects, such as clean car rebates.

The Executive Officer invoked this flexibility last month by requesting allocating six million of the $10 million available from hybrid and zero-emission truck vouchers to the Clean Vehicle Rebate Project. This $6 million, combined with $4.5 million from the Energy Commission, brings the total to $28.5 million for clean car rebates in the fiscal year 2012-2013, which should carry the program through summer when the next year's funding becomes available.
AIR POLLUTION SPECIALIST MACUMBER: In order to keep up with the success of the program, the fiscal year 2011-2012 funding plan approved in July of 2011 reduced rebates from $5,000 to $2500 for zero emission vehicles and from $3,000 to $1500 for plug-in hybrid vehicles. At that time, we had issued just over 1300 rebates in total, but expected the demand to climb quickly.

As shown in this slide, in September of 2012, we issued the 10,000th rebate. And by the end of this month, we expect to surpass 20,000 rebates, less than half a year later.

It is important to note that our Clean Car Rebate can be combined with a federal tax credit of up to $7500 additional local incentives and high occupancy vehicle lane access through 2015. Additionally, efforts to fund infrastructure to support the widespread use of clean cars is underway.

The Energy Commission has made substantial investments in public charging infrastructure through their AB 118 program and a federal tax credit and local rebates are available for residential charging infrastructure.

AIR POLLUTION SPECIALIST MACUMBER: To further
put the success of the Clean Vehicle Rebate Project into perspective, this slide provides a month by month illustration of rebate activity since the project's launch.

As you can see, demand for rebates reached a record high in the fall of 2012, with close to 2,000 rebates issued each month from October through December. This level of demand continues today, and we expect it to grow. While staff expects the total infusion of funding to carry the program into summer when new funds from the upcoming funding plan become available, it is possible that funding could run out first.

To address a limited term shortage of funding, the Executive Officer has the discretion to establish a waiting list to bridge the gap between this year's and next year's funding. Staff will continue to monitor expenditures and will implement appropriate action as needed to minimize any disruption in the program.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: On the heavy-duty truck side, voucher amounts are based upon vehicle weight and range from the $8,000 for a commercial hybrid pickup truck to $40,000 for a Class 8 urban delivery truck or refuse hauler.

For zero-emission trucks, vouchers range from
$12,000 for a commercial pickup to $55,000 for a Class 8 delivery vehicle. ARB encourages local air districts to offer co-funding to further incentivize deployment of these advanced technologies in their region.

In 2011, the Energy Commission provided $4 million to help further buy down the cost of 150 zero-emission trucks, including the 100 UPS trucks manufactured by EVI that Governor Brown recognized at a press event last month.

Finally, the San Joaquin Valley Air District is now offering $2 million to increase voucher amounts by up to $28,000 for hybrid and zero-emission trucks and buses operating in the valley.

---o0o--

AIR POLLUTION SPECIALIST MACUMBER: Voucher activity for hybrid and zero emission trucks has fluctuated over the past few years. As you can see, demands for hybrid and zero-emission trucks and buses peeked in 2010 when the project launched and funding first became available. However, several circumstances contributed to a significant market slowdown over the past few years.

First, early adopter fleets, such as UPS and Coca-Cola saturated their demands for hybrid trucks with their initial purchases. Some fleets also found that
their driving patterns did not optimize fuel economy
benefits as much as they had expected and delayed
subsequent purchases. And low cost natural gas has made
CNG-powered trucks and buses more attractive relative to
hybrid and electric vehicles.

Fortunately, there is reason for new optimism
that interest in hybrid trucks will begin to grow again.
Hino Motor Company, owned by Toyota, has recently
introduced a low-cost heavy-duty hybrid truck that
leverages Prius technology. This more economical Hino
hybrid has driven voucher demand among smaller fleets.

Also, battery electric and zero-emission truck
demand has risen recently in response to the increased
voucher amounts referenced earlier.

--oOo--

AIR POLLUTION SPECIALIST MACUMBER: Now that you
have been updated on our AQIP projects, I will highlight
the issues that bring us before you today.

Although we included flexibility within our
fiscal year 2012-2013 funding plan to move AQIP money
between projects based upon need, we did not provide
flexibility to move money to the Truck Loan Assistance
Program. This increased activity in the Truck Loan
Assistance Program that occurred this past year was
greater than anticipated. And therefore, the program was
not identified in the funding plan as an eligible AQIP project.

Because of this, current year program funds currently cannot be reallocated by the Executive Officer from AQIP to the Truck Loan Assistance Program. For that reason, staff requests that the Board grant the Executive Officer authority to reallocate up to $4 million from the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project to the Truck Loan Assistance Program to cover a portion of the program's shortfall for calendar year 2013.

After shifting the proposed funds to the Truck Loan Assistance Program, over $12 million will remain available for hybrid and zero-emission trucks.

Staff expects this will be sufficient to meet anticipated demand in the project through the end of the current fiscal year.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: Looking ahead, staff will bring the proposed AQIP fiscal year 2013-2014 funding plan to the Board for consideration in June of this year. Staff is developing a plan that builds upon our past success, but does so with less revenue.

Simply put, funding demand for current AQIP projects exceeds expected AQIP revenue. In addition, staff continues to evaluate how AQIP might be able to
provide additional support for truck loans beyond the 
reallocation recommended today.

To be ready for June, staff is working closely 
with stakeholders to develop next year's plan. On April 
4th, staff will hold a final public workshop here in 
Sacramento. And in mid to late May, we will release the 
proposed plan for the next fiscal year.

--o0o--

AIR POLLUTION SPECIALIST MACUMBER: In closing, 
staff asks that you approve allowing the Executive Officer 
to reallocate up to $4 million in fiscal year 2012-13 
funding from the Hybrid and Zero-Emission Truck and Bus 
Voucher Incentive Project to the Truck Loan Assistance 
Program.

Further, staff will continue to seek additional 
funding opportunities to assist the Truck Loan Assistance 
Program, such as coordinating with efforts underway with 
the Proposition 1B program.

I'd be happy to take any questions you have at 
this time.

CHAIRPERSON NICHOLS: Thank you.

Any questions on this presentation? It seems 
pretty straight forward.

BOARD MEMBER RIORDAN: No question. I would be 
happy to move approval of the resolution.
CHAIRPERSON NICHOLS: All right. We have a motion.

BOARD MEMBER BALMES: I'll second.

CHAIRPERSON NICHOLS: Any further discuss?

I'm sorry. We do have a person who wishes to comment. That's okay. We have the motion in front of us. We can still hear from present comment from Matt Schrap.

MR. SCHRAP: Thank you.

I was concerned there that maybe I shouldn't have played roshambo with Nidia outside to see who was going to testify on the last up with. So I'm glad this worked out.

But thank you, Madam Chair and Board members. My name is Matt Schrap, Vice President of Government Programs for Crossroads Equipment Lease and Finance.

Stand before you today to offer support for staff's proposed to reallocate 2012-2013 AQIP funds to the Truck Loan Assistance Program. Crossroads is a home grown California-based business that offers unique capital solutions for commercial equipment operators in California.

Our portfolio includes many different configurations and engine offerings such as clean diesel, alternative fuel, and hybrid. Our clients range from large Fortune 500 corporations to single truck operators and everything in between.
The Truck Loan Assistance Program has been a crucial tool for eligible credit-challenged equipment owners in California. In fact, Crossroads has enrolled close to 1,000 projects in the CalCAP Loan Assistance Program. Many of these participants, as mentioned earlier, are single truck operators. We thought about bringing all of these folks with us to encourage their support for the program, but frankly, they've already benefited.

There are tens of thousands of other California-based single truck operators that will be required to upgrade at the end of this year. Not to mention the thousands of small businesses that are in the midst of the drayage on-road and GHG rules. With limited access to statewide incentive programs, this Loan Assistance Program is their only hope for meeting upcoming deadlines.

Although $4 million will help support the program in the next budget cycle, CARB should continue to recognize the need for loan assistance to help equipment owners access clean, compliant equipment.

Please approve the proposal before you today to allow the Executive Officer to allocate up to $4 million to the Truck Loan Assistance Program and also encourage the EO to fully fund the program with the available cash.
through the end of the year, with the added priority for
future funding allocations for existing and additional
loan assistance programs for equipment and vehicle
purchases through the California Pollution Control
Financing Authority.

I thank you for your time and look forward to any
questions.

CHAIRPERSON NICHOLS: Thank you for taking the
time to come. And we're just as glad you didn't bring the
truck owners, because we want them out there working so
they can repay those loans.

All right. We have a motion and a second. All
in favor please say aye.

(Ayes)

CHAIRPERSON NICHOLS: Any opposed? All right.
No abstentions. And it is approved. Thank you very much.
Good work.

We have one more item on our agenda people are
prepared to power through.

EXECUTIVE OFFICER GOLDSTENE: If it's okay, we'd
like to take a short break or the lunch break. Maybe take
lunch. At least a short break.

CHAIRPERSON NICHOLS: Which is it?

CHIEF COUNSEL PETER: I thought we were going to
take a lunch break. And the court reporter was willing to
go on through the last item without a break, but I don't
know if it makes sense to do our closed session and our
lunch now and come back for --

CHAIRPERSON NICHOLS: Well, aside from the court
reporter's convenience, if it's okay with the Board, we
should just check what people want to do. Do you want to
take an early lunch break for finish all the work that's
in front of us? We usually like to get through it before
we go have lunch. So why don't we take a very short,
short break. Come back and finish. Five minutes. Thank
everybody.

(Whereupon a recess was taken.)

CHAIRPERSON NICHOLS: We have one additional item
and public comment, and then we will break for lunch. And
we will have executive session and someone will come out
and report on the actions taken during executive session,
probably me and anyone else who's still available.

So we will turn now to the report of our
Ombudsman.

There is a little bit of an opening statement I
could make here.

EXECUTIVE OFFICER GOLDSTENE: You could do it or
I could do it.

CHAIRPERSON NICHOLS: I do want to just say this
is our third report from Ms. Bowen, who came to the Air
Resources Board to help revamp the Office of the Ombudsman. This is a position that actually is created as a result of the Federal Clean Air Act. But it also is an important position for us, because it's a way to ensure that small businesses are heard early in the process of developing policies and regulations. And that we get to have a more robust engagement than would come about through the normal process of workshops and hearings where inevitably there is a tendency for groups that are better funded to dominate the discussion.

So it's very helpful that we have a person who's got this specific responsibility. And we have taken advantage of it in recent years by really activating the Ombudsman's office and role. So it's not what people think of as typically just a place for people to bring complaints, but it's a place actually initiating conversations.

So Ms. Bowen is going to talk about what she has in store for next year, as well as what's been going on. La Ronda.

(Thereupon an overhead presentation was presented as follows.)

OMBUDSMAN BOWEN: Thank you, Chairman Nichols. The ARB's influence, as you know, stretches from California to nations around the world and that impacts
the work of the Ombudsman.

Our 2012 report, though focused on California's small businesses, will demonstrate how we connect with other agencies and organizations to help achieve the goals of AB 32 and other ARB programs.

--o0o--

OMBUDSMAN BOWEN: Today, I'll review our mandates, discuss small business models and relevant definitions, then using examples from our office and our network of partner organizations will demonstrate progress made to implement our charges during 2012. You will see how staff is deployed before considering specific areas where we are aware of developing small business needs. We will close with goals for 2013.

--o0o--

OMBUDSMAN BOWEN: The Ombudsman, the laws -- this slide is just our mandates. The laws that most define the roles of the Ombudsman are the education and environment initiative, the California Government Code, and Section 507 of the Clean Air Act amendments and, of course, AB 32. After defining small business, we'll consider each of these separately. We're taking the time to define small business, because we have had so many questions from Board members what that is.

--o0o--
OMBUDSMAN BOWEN: First, I'd like to put you in the small business frame of mind. People are in business for different reasons, which colors the relationship they have with the Air Resources Board.

Access to capital and timely information are common across all of these businesses. All offer an excellent opportunity for greenhouse gas reductions, economic stability, and healthy communities.

Some small business owners intend to stay for the long haul. They're concerned about growth. They are essential connectors to their community. They usually get involved with neighborhood schools and civic organizations.

ARB cares about these firms particularly because they're critical links in our ability to diffuse new technologies. Others are in business primarily to support themselves and their family. Their exit strategy is to work until they save money to pay off the house. And when the kids are out of school, sell everything and retire. We care about this group because they are great connectors to the next generation.

Inventors are owners who go in and out of business ventures more quickly. They're concerned about growth to the point of sale. They seek capital and bring an innovation to market. They want to know how
regulations or policies are going to drive technologies, and ARB can count on them to invent solutions to regulatory problems. And they, themselves, are early adapters.

--o0o--

OMBUDSMAN BOWEN: So how do we define small business? Small business gets defined in different ways for different purposes. The three most relevant to the Ombudsman program are these: EPA Clean Air Act amendments, say 100 or fewer employers and not a major source. That's because EPA was focused primarily on stationary sources at the time. This is in Title 5.

U.S. small businesses administration; fewer than 500 employees and $14 million in sales over three years. As with everything, there are exceptions.

California Department of General Services has domiciled in California and 100 or fewer employees. And $14 million in sales over three years, unless they're manufacturing, which they have no sales limit.

The California Public Utilities Commission has 20 kilowatt electrical demand. This definition was identified in December of last year for the purpose of directing utilities to return cap and trade allowance revenue. We are currently working with the utilities to gain a better understanding of what types of businesses
might not be eligible for cost recovery under this definition.

So if a business has -- if a business exceeds 20 kilowatt demand in more than three months within the previous twelve-month period, then they are not eligible for those cost recovery.

--o0o--

OMBUDSMAN BOWEN: The California Government Code has a specific mandate for the Ombudsman. It requires us to facilitate communication with small businesses, investigate and seek solutions to complaints, report and make recommendations on small business concerns, and assist the agency to achieve our's procurement goals.

For example, the Ombudsman receives comments and complaints and questions primarily through its 800 number hotlines, through e-mail, and through referrals.

--o0o--

OMBUDSMAN BOWEN: So I'm just going to give one example out of each of these. This is the El Monte call report. We have the two busiest hotlines in the Air Resources Board are the 866 6diesel line that the Mobile Source Division manages and ARB's El Monte hotline. The Ombudsman manages the El Monte hotline.

In 2012, we received almost 74,000 calls compared to about 50,000 calls in 2011. Customers have a variety
of questions, but most calls are associated with diesel regulations.

The next two areas receiving the highest number of calls are aftermarket parts and vehicle recalls and registration.

And in the ZEV presentation, you heard people often call wanting to know, I want to buy this car. Should I register it, will I be eligible for the white sticker or the green sticker? That was the other presentation presented is really accurate that people care about that.

The Ombudsman Sacramento office also received an additional 978 calls for assistance, and about 500 of those were related to onroad diesel issues.

So we received -- the Ombudsman gets most of the Spanish-speaking callers on diesel regulation and Anthony Marin, who is usually out there, is the one that answers most of those calls.

--o0o--

OMBUDSMAN BOWEN: In 1990, Section 507 Clean Air Act amendments, Title 5, Section 507 of the Clean Air Act amendments established a three-part program in the states and the territories to help small business owners implement regulations. The program consists of the Ombudsman, technical assistance, and a Compliance Advisory
Panel.

The overall goals of 507 are to ensure effective and timely communication with businesses, including regulations in plain language. We, the Ombudsman, are the connecting wire between the 35 local air districts, ARB, and the national 507 programs.

To provide businesses with technical assistance, including permitting and pollution prevention, at ARB, we include greenhouse gas emission reductions, mostly through our Cool California Program and develop and promote compliance tools and resources.

ARB does much of this work by connecting with other statewide agencies, such as GoBIS, which you heard referred to earlier, and the green business program. Compliance Advisory Panel is a third part. And it is the small business voice to help agencies understand small business perspectives, as well as to help small business understand regulatory agencies.

A really significant accomplishment for us in 2012 was the establishment or reestablishment of the CAPCOA Small Business Advisory Panel. And Chairman Nichols made the request to the CAPCOA Air Pollution Control Officers Association and Larry Greene from the Sacramento Air Pollution Control Agency facilitated that.

Larry Greene and I are working together to
implement this Committee, which will consist primarily of small business owners and will provide ARB and the local air districts with insight into how to work effectively to engage small business stakeholders in the development and implementation of mission-critical policies and rules.

Next steps for Larry and I are to identify the types of industries and potential representatives. Then Mr. Greene will share the information with CAPCOA and I with ARB's executive staff and any Board members that wish to be informed. We certainly do welcome your participation.

---o0o---

OMBUDSMAN BOWEN: Climate change requires that we embrace more than criteria pollutants, focus small business assistance, and to ensure that we reach California businesses across all sectors. Ombudsman has established connections with organizations like the two we'll use for examples in the next slide.

So connections. An example collaboration that we have is with the Green Business Program Network. This grew out of the Pollution Prevention Network. 2011 legislation gave the Department of Toxic Substances Control the oversight of the California Green Business Program. ARB has been engaged through Cool California. Green Businesses Network is a consortium of local

California Reporting, LLC
government entities whose mission is to help businesses reduce waste, water use, and energy use.

ARB worked closely with DTSC and contractors to develop a common platform for businesses who want to take climate actions and limit their environmental impact. We wanted to make sure that we had similar emission factors built into our tools, such as calculators, data sheets, and check lists.

ARB promotes the Green Business Program on our Cool California small business calculator where actions that qualify for green business certification are marked by a special green icon.

Before a business becomes certified, actions reported are verified by a representative of a local municipality, including a utility for energy, the Water Board, and a municipal waste organization. Purchase or work orders are double checked by the Green Business Program representative.

So I put this chart so if we look at the first numerical column and only at the GHG and energy savings, we can see that California realized a benefit of 171,000 tons of GHG saves and over 38 million kilowatt hours of energy saved from the 2,664 business who changed their practices, that first column.

--o0o--
OMBUDSMAN BOWEN: The next slide shows our strategy for touching California's 3.4 million small businesses is to multiply our efforts through connections. Obviously, we can't do it all ourselves. These next through slides use just the Sacramento region to demonstrate the multiplier effect of our strategic partnerships.

When properly developed, this network will inform policy, encourage the financing, demonstration, and deployment of clean technologies, readily identify and correct knowledge gaps and obstacles to success, and help California achieve the triple goals of a healthy environment, healthy people, and a healthy economy.

--o0o--

OMBUDSMAN BOWEN: One area is technology where I'm going to use just this one example of one of those partners. The partner is SARTA. ARB is relying on the development, demonstration, and deployment of clean technologies to achieve its goal. By engaging with the Sacramento Area Regional Technology Alliance, SARTA, Ombudsman makes one contact and gains real time knowledge of how clean technology businesses are progressing throughout the entire Sacramento region.

This matters because many of these clean tech firms are developing projects or products that will reduce
greenhouse gases, criteria pollutants, or water use. Some
are working on alternative fuels, transportation,
renewable energy, and other relevant clean technologies.

Additionally, the ARB gains a distribution
network for resources such as our Cool California website,
which is in itself a collaborative effort, and the ability
to learn from and inform these businesses as we begin to
plan for climate impacts.

--o0o--

OMBUDSMAN BOWEN: According to a report by Clean
Edge called 2012 U.S. Metro Clean Tech Index, four
California cities were ranked in the top ten. The Clean
tech Index is a set of 50 metro scores which evaluate each
metro area based on involvement and leadership in clean
technology. Scores are based on performance in four
equally weighted categories of indicators: Green
buildings, advanced need transportation, which means
advanced infrastructure needs, clean electricity and
carbon management, clean tech investment, innovation and
workforce.

With an overall ranking of number four, the
Sacramento region ranks first among major metropolitan
areas in clean economy job concentration and has emerged
as an early hub for electric vehicles, which we heard
earlier, and maintains an exceedingly efficient building
stock, particularly for those qualifying for energy star certification. Los Angeles is number seven. We have number one San Jose; number two, San Francisco. That's not on here.

--o0o--

OMBUDSMAN BOWEN: So if you think of this Sacramento model of partnerships and apply it to the rest of the states, you will see that by connecting partners, ARB can leverage its resources to better serve California's 3.4 million small businesses, which provide over 51 percent of jobs.

Ombudsman professional staff are assigned regions and are responsible for building relationships that will help us each and understand these customers.

--o0o--

OMBUDSMAN BOWEN: The Ombudsman has identified a few areas where we know small businesses have needs and we want to anticipate them and begin to discover answers.

Technology is one. We have talked with customers throughout the state who have technology solutions that they cannot bring to demonstration, despite having ready customers. Others have a small-scale project that's been demonstrated but cannot find financing to go from demo to full-scale demonstration and commercialization.

Financing, you've already heard there is
challenges there. Small truck fleets have great
difficulty finding financing for clean technologies and
new vehicles, despite ARB's excellent efforts. And the
program, the PLACE program, is really excellent. It
really is. The customer you have a letter from has funder
in PLACE program.

Other avenues must exit, not only for trucks, but
for deployment of cleaner technologies across the board as
part of our low-carbon economy.

In the area of climate, we're just beginning to
see research on the role of small businesses in helping
communities bounce back from major climate events, ranging
from hurricane Katrina to the Chicago heat wave and super
storm Sandy.

How does this play into sustainable communities,
and what will small businesses need that we can facilitate
through our network of partners, agencies, and
organizations. Do we know if adopting sustainable
practices will make a businesses more resilient than its
competitors?

--o0o--

OMBUDSMAN BOWEN: So leaving the small business
part and going to the education piece, California is
poised to lead the nation in environmental literacy with
the Education and Environmental Initiative. But
developing a new generation of informed decision makers extends beyond the requirement to develop an environmental curriculum for K through 12 students.

Under our Air Quality Education Program -- which is separate from the EII Program, it's just an ARB initiative -- ARB works with educators, businesses, and other organizations to make the environment part of the normal thinking process of today's youth who will be the policy makers, business owners, and parents of the future.

In 2012, Ombudsman joined with the Sacramento Municipal Utility District's Youth Energy Summit, or YES event. YES is designed for high school juniors and seniors from the Sacramento and Lodi areas and focuses on California's energy future. The theme last year was clean technology, while this year's theme is business of being green.

Over 90 high school students are divided into project teams to work on green energy, energy conservation, and sustainability projects to fulfill a need in the community.

The teams will present their projects to a panel of judges on the steps of the State Capitol for a chance to win scholarships.

And the next one will be April 26th of this year for the green business one. This is one of many events
and activities the Ombudsman engages in on behalf of youth
and the Air Resources Board.

--o0o--

OMBUDSMAN BOWEN: Another group that comes to us
for education is foreign visitors. Foreign visitors want
to learn from ARB. National leaders worldwide are
interested. The policies we implement have significant
economic implications for developing economies in Asia, as
well as established countries in North America and Europe.

The Ombudsman manages foreign visitor requests
for meeting. In 2012, we facilitated approximately 25
different governmental and industry groups from around the
world. ARB always great to support our work there.

Climate change and ARB's cap and trade programs
were topics most frequently requested. However,
discussions included the state of science and math,
education. China is particularly interested in that.
Technology development, business and economy, and requests
to establish Memoranda of Understanding for ongoing
collaboration.

So looking ahead to the rest of 2013, Ombudsman
has four key goals to identify financing resources,
partners, and strategies to meet the needs of California's
small businesses that we know exist while we continue to
learn about other needs.
Further, educating ourselves on small business and climate resiliency, implementing the small business compliance assistance panel, and strengthening our networks.

--o0o--

OMBUDSMAN BOWEN: So finally, I saw a quote from Peter Drucker, a great business thinker and writer. I thought of ARB right away. When Peter Drucker described an entrepreneur, I think he also described the work of the Air Resources Board. In everything from diesel risk reduction to advanced clean cars and the Scoping Plan, we have searched for and responded to change. And we are looking for new ways to exploit all the opportunities that those changes imply. I think ARB has a lot in common with California business owners and entrepreneurs.

That concludes my presentation. I'm happy to answer any questions.

CHAIRPERSON NICHOLS: Thank you very much. Appreciate the overview of what you've been up to. I can say from personal experience, as I interact with you quite a bit in various forums, that La Ronda has really proven to be a terrific ambassador for ARB and for our work. So it's a pleasure to be able to have her come and report to us. And I know she's always available to
Board members if they have questions or comments outside of the Board meeting.

But if anybody wants to make a comment. Yes?

BOARD MEMBER BERG: I would just like to thank La Ronda for all the work she does. I know over the last three years when you appointed her, you had a vision for this department. And it's amazing the work that you have done over the last three years and to see the Ombudsman department reaching out in such a dynamic way, being very proactive. It's really refreshing.

I do have an opportunity to work directly with her from time to time, and it's always a pleasure. So thank you very much for that great update.

CHAIRPERSON NICHOLS: Thank you. I think that concludes --

BOARD MEMBER SHERRIFFS: I just want to add my thanks. And often we get distracted by the big folks because they push back a lot harder. But the small business is so important and it's particularly important in the valley. And I thought your looking at the small business models was helpful and good and helps certainly reminding me as I look around at small businesses in the towns, in the valley, those people are in it for the long haul. They are committed to their communities. They're not going away, you know. The economy goes up and down,
but they're not going away. They're a very important partner in the work we do. And I think especially SB 375, that it's a key partnership. So thank you.

CHAIRPERSON NICHOLS: Thank you very much.

We have one more item on the agenda and that is a the public comment period. We have two people who have signed up for public comment. So they will please come forward now and you each of three minutes.

MR. ZELTZER: Hello. My name is Steve Zeltzer. I'm with United Public Workers for Action and the Injured Workers National Network.

And the reason I'm here today is to discuss the issue of workplace bullying and the situation of workers in California, public workers, and workers in this building who being bullied. There is an epidemic of attacks -- workplace bullying attacks on public employees in California nationally. They're being scapegoated, being harassed, and bullied. And in our view, it's an organized effort of management to drive workers out of the workplace. And we feel that this is a serious health and safety issue.

Also, it's costing the public millions of dollars because workers who are harassed and bullied on the job end up going on disability and workers' comp because of the stress and conditions on the job.
This issue is not just an issue in the schools in California and schools nationally, but it's an issue in the workplace, and it has to be addressed. As yet, there is no law in California legislation against workplace bullying, but we're working to make that change so that it is addressed in the law.

But regardless of whether it's in the law or not against workplace bullying, it's still an issue. What happened in your last meeting where an employee here, Karen Snyder, spoke about the issue of workplace bullying, following that meeting, she was harassed and bullied by the manager right after speaking at this public forum.

We think this is a serious issue. This public forum should be a vehicle for workers, the public, to speak on issues and not be retaliated against for speaking on these issues. Yet, this is exactly what happened at this agency.

There is workplace violence going on against public workers by managers. And the head of this agency is aware of that. Yet, it's not being addressed by the management of this agency. We think this commission has to start addressing it.

One other thing that's going on at this agency is there is extremely high turnover of the staff. Why is that? Why are people leaving? The reason is they're
being bullied out and harassed. It is not a good workplace environment for the employees, and that's why people leave.

This needs to be examined. You have to examine the cost of this. The people who are leaving because of harassment and bullying and the public of California, the people of California, expect that the public workers should be treated with respect and professionally so they could do their job and not be harassed and bullied on the job. I hope you address it. It's not going to go away. We're going to be coming back until it is addressed and corrected at this agency. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Ms. Snyder.

MS. SNYDER: Chairman Nichols and Board members, of course, you know I am Karen Snyder. I worked at the Air Resources Board for around six years. And I'm here to reiterate again that, you know, there's been a purposeful and, you know, frankly almost mental torture. I've been out twice for CAT leave just so I could come back and breathe again. I take my sick and vacation just so I can breathe again so I can come back and be tortured again. I've tried to leave, and I told you last time there is -- I can't because of what's going on here.

And I'm not the only one. I'm just the only one
that is, I suppose, brave enough to speak up. I don't feel very brave.

But I know that you oversee the executive of ARB, and in turn, who has jurisdiction over this type of workplace harassment. The day after I spoke at the first Board, I was sent up to workplace violence again after I asked -- told you that the first time was completely biased. And I was sent up again for workplace violence for a spat between myself and another employee that we both apologized later for.

So I urge you to have an investigation. I gave you the names of a lawyer's office who does mediation for this sort of thing. They were recommended by DOJ. If the they're good enough for DOJ, I would say they're good enough for ARB.

There needs to be an investigation. We work so hard for the health of the people of California.

And again, I want to make clear, my complaint is against management practices, not against the work that's being done here at ARB. Make that very clear. But the management practices here at ARB are just as unhealthful as anything that we're fighting against. I've said this before.

My health has Deteriorate greatly since I worked here. When I got here at ARB, I was in the best place of
my life. The best place of my life. Since then, there's
times -- I walk in here every morning. I do the best job
that I can, all the while holding my breath because every
single day there is a mental gun to my head. And I know
that my time is limited here. Management is working very
hard at getting rid of me so I stopped speaking out. So
they're doing a good job of that. That's for sure.

CHAIRPERSON NICHOLS: Ms. Snyder, you had time to
speak before the Board, but your time is up.

MS. SNYDER: Okay. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Well, this is the time for the Board to move to
executive session. But before we do, probably be a good
idea while we're still in open session to say a few words
about transitions at the Board, because it's a momentous
occasion. This is a Board that has had tremendous
stability and has been tremendously productive.

I think I'm going to first speak about our Board
Member Dee Dee D'Adamo since she's got the flowers already
and the thanks of the Coalition for Clean Air. And so I
think it's time for our thanks as well.

I'm so pleased that Dee Dee is not leaving
Cal/EPA or leaving State government. In fact, she's going
from being a part-time member of this Board to being a
full-time member of the State Water Resources Control
Board. Governor Brown has handed her a very tough assessment. He's made it clear the Water Board is going to be playing an active role in making some big decisions about California's water future. And Dee Dee is going to be stepping into the role, which she fills very well here of being both a lawyer and a person who can speak knowledgeably about the interests of agriculture in our state.

She I think has hones her skills at conflict resolution, working at this Board. And therefore will be -- that will be much priced in her new position at the Water Board.

But after 13 years of serving on this Board -- she was here when I came back for the second time -- she has established herself as one of the stalwarts for this Board in terms of keeping us focused on our job, keeping us focused on the needs of some of the most impacted areas of our state, in particular. And she has been just a tremendous colleague and example of I think the way all of us like to think that we can handle ourselves when we go out and speak in public on behalf of air quality. She's done a lot of work above and beyond the call of difficulty duty, as we all do. But in particular, she's been a really tremendous help and advisor to me when it's come to implementing a lot of our regulations that effect the
Valley.

So with all of that, I have a resolution -- I don't have a resolution. I have a plaque, the famous plaque people get when they leave the Air Resources Board. And the only difference from prior years is that it not only recognizes you for your contribution to clean air through your actions, but also commends your work on air pollution, toxic risk, and greenhouse gases. So you've done it all. Thank you. Thank you so much.

(Applause)

Chairperson Nichols: So we don't need to do speeches, but some people may feel like they'd like to. So if anybody wants to weigh in, please do.

Board Member Riordan: Madam Chair, may I having served with Dee Dee all those 13 years, I just share this as she inspired me to be more prepared. I've never met a more prepared Board member. She was thoughtful, but she asked the most penetrating questions. And for that, I think the Water Resources Control Board will welcome you, Dee Dee. Welcome you.

Your work is cut out for you. We will miss you here. We know you're not far away. And there is something very similar about water and air, though I think those in the water industry all know that water flows most often downhill right into a court room. I've never seen
litigation in my life more often than in the water areas. But we'll miss you and thank you for 13 wonderful years.  
(Applause)

CHAIRPERSON NICHOLS: I hope we're going to have an opportunity to celebrate with you. I know you're starting your new role April 1; is that right? But you won't be far away. So we'll have a chance to perhaps do some more partying after this is all over.

BOARD MEMBER ROBERTS: Well, starting on April 1st is kind of suspicious I think. But might want to put that off to the second.

I think I'm one of the few people that have served with you the entire time you're here. You've been a constant voice for quality in programs in air quality. And I feel -- I have mixed feelings, A, that we are going to lose somebody that has been extremely competent and professional in every way.

I think the where you're going really needs that help. I would say that there have been -- I think there are examples of things that we do on this Board that could be transported to other agencies. And I hope that you have the kind of success over there that we've enjoyed for the last decade or so here. I'm absolutely certain you will make a difference.

(Applause)
CHAIRPERSON NICHOLS: Dr. Balmes.

BOARD MEMBER BALMES: Well, I didn't precede you on the Board, but I remember the very first meeting I sat on the dais next to you where it was a very political and unusually political meeting. It was when we had Prop. 1B issues about how money should be divided.

And I noticed that I voted against you the very first meeting, but you were still very welcoming. And you actually said, "John, the meetings aren't always this bad, really."

Anyway, it's been a great pleasure to serve with you. I've really appreciated the rides to the train station. And I'm going to miss you greatly.

CHAIRPERSON NICHOLS: We will all miss you.

BOARD MEMBER D'ADAMO: I have a few words the say.

CHAIRPERSON NICHOLS: Three minutes.

(Laughter)

BOARD MEMBER D'ADAMO: I'm going to keep this short. We've had so many changes recently. And I rather than going through the list of things that we've accomplished through the years and, of course, it's been many, I'm going to take a little bit more of an emotional moment here to just say what a tremendous honor it has been over a 13-year period to serve with such a
distinguished group of people on this Board. Everyone here today and many that are no longer with us and even some that have passed away sadly.

And staff, you're tops. And I don't think there will be ever anyone that can replace the amazing relationship that we all get to share with you. We are so honored to be able to everywhere we go know that we can be 100 percent confident in what you're telling us and the amazing work that you do and the dedication. So thank you very much, from the bottom of my heart.

And then I'll just say that it's all about the public health. It's about the public health, the environment, and the health of the economy. And I think we can all hold our heads up high and say that we've kept a strong economy going, even when we've had those bumps in the road, we come back. We made adjustments. And I feel that we do the right thing.

So it's been an amazing run, and I just look back to when I got started. I had a baby in my arms at the confirmation hearing. And he's now a freshman in high school and two kids and one that just graduated from college, one in college.

And I wanted to do a small part to improve the air quality in the state of California, being very concerned raising three children in an area with an
extreme non-attainment designation. I'm so thrilled that we've seen a vast improvement where I live and all over the state. And it's just wonderful to have been some small part in that improvement.

So thank you for the opportunity. And I look forward to seeing you all in the halls. And I'll be next door at a lot of hearings when you're here. So I'll come by and visit. Thank you.

(Applause)

CHAIRPERSON NICHOLS: Okay. Now I get to say a few words about James Goldstene, who the Governor has also chosen to move onto another spot where I know he's going to be tremendously useful to the people of the state of California.

When I got to the Air Resources Board, it was in the wake of a very dramatic firing of my predecessor and the resignation of our then Executive Officer. And I served for the first almost six months without an Executive Officer because I was so concerned about knowing what the right structure was, finding the right person, having the right dynamic between the Chair and the Executive Officer, because I had heard so many tales about how things could go awry.

And so it took a little while. But after a lot of consultation with senior people around the Board and my
own observations, I finally decided it was time to come to
grips with the situation since I couldn't really do both
of these jobs and there was a need, in fact, for an
Executive Officer, that I actually went out and asked
James Goldstene to apply for the job. He did not apply
initially, which left us in a somewhat awkward situation.
But we were -- fortunately, state government allows you to
open up the period. And so James agreed to put his name
in.

As I recall, I made a number of very specific
promises about things like not having to work too hard,
plenty of vacation, valuing family time, there were
probably a few others along those lines which, okay, well,
we tried. It wasn't all that bad.

But James really was and has been a terrific
asset to ARB in many ways and a great partner in all of
the big projects that we've undertaken.

Obviously, it is a difficult dynamic always to
keep in balance because, you know, the Executive Officer
has the ability to act without the Board, if he chooses to
do so. So it be a situation where you have an Executive
Officer who is just running the place and the Chair who
was in absentia. Or you could have a Chair who was in
conflict with your Executive Officer.

And that has not ever been the case with us.
We've always been able to really work very collaboratively and collegially for the good of the organization as a whole.

I think James will be remembered for his time here, in particular, for some of the hard reorganizations work that he undertook internally because coming -- AB 32 landed on the Air Resources Board with some additional resources, but without a cookbook for how to go about doing it.

So having to first create the ability to get a Scoping Plan and the initial program together and then figure out how to take this ongoing set of responsibilities and integrate them into the work of the organization has been a critical task.

James is going a little bit further down the street. He's not going to be in this building anymore. But he will be around in a very important role as an appointee of the Governor to Undersecretary to making the wheels turn at the Department of Consumer Services, State and Consumer Services Agency -- I'm sorry I got their name wrong.

But James, we really want to thank you for all of your time and good work here. You have put a mark on the organization, and it's been a good one. So I just want to thank you on behalf of all of us. And I guess if anybody
else has anything in addition. We're going to celebrate
you later today at least, I think there is a plan for
involve ing some alcoholic beverages. May involve some
other folks as well.

Yes, Ron.

BOARD MEMBER ROBERTS: If I could, I won't be
there later today. We did have a little celebration last
night.

Let me just say I've been on this Board for a lot
of years, working with a number of different Executive
Officers, I don't know anyone that I've worked with that I
felt more confident in having conversations and getting
the information and getting the straight scoop, so to
speak. That's extremely important when you serve on those
boards. There's a lot of other stuff out there that can
effect our decisions.

It's been difficult for me, knowing he is such a
San Francisco Giants fan all these years. Some of my
friends in San Diego don't understand why I'd talk to him.
But it's something else we've shared.

I was really relieved to hear where he was going,
since he'll be overseeing a number of things, including
the architectural licensing. Since I let mine expire and
I didn't know who to call, at least I'll know who I can
contact now to get back in the good graces, should I ever
need to practice again.

    But James, I just want to thank you. Not only
for what you've done here, for me, being a good friend.
You'll always have a seat at the Padres games, even if the
Giants aren't playing. I hope to see you in your new role
and to work with you on some of the things you'll be
involved in there.

CHAIRPERSON NICHOLS: And Sandy?

BOARD MEMBER BERG: I, too, want to wish you all
the best. I was fortunate to be able to interact with you
before you became the Executive Officer where you helped
craft some important speeches for me as you were sending
me out as ARB representative. And so it was very fun to
go through with you when you were considering the
executive position and what a great job you have done.

You have been one of those go-to guys that I have
counted on, and I've really appreciated that. I've taken
on some other responsibilities because I know that you and
the staff have been there to back me up. And I really,
really appreciated that.

    So I will miss you greatly. But I'm excited to
see about what you will be doing over there and keeping in
touch. So all the best, James. Thank you very much.

CHAIRPERSON NICHOLS: Okay. You can say a few
words.
EXECUTIVE OFFICER GOLDSTENE: I'll just say a few words.

Mary is right; she made me an offer I couldn't refuse. When I talked to, at that time, Tom Cackette and Mike Schivo and Lynn Terry and Tom Jennings when he was Chief Counsel, they basically all refused to tell me about the realities of the position when I would ask them, "How come you're not applying for the job?" Boy, did I learn.

But I just want to thank all of you and the team, not just the senior team, but all the employees at ARB who've made it possible for us to accomplish all the great things we've accomplished in the last five-and-a-half years at least I've been in this role. I just want to say thank you all.

I look forward to seeing you all. I'm sure there will be opportunities for us to exchange phone numbers and e-mail. But I will be just down the street. And I'll be checking in. And Ron, I will check on your licensing status.

Thank you very much. I look forward to celebrating tonight.

(Applause)

CHAIRPERSON NICHOLS: We're recessing into closed session. The Board members will be retiring to our room in the back here, and we will announce any decisions that
we make when we come back.

(Whereupon the Board recessed into closed
session from 12:33 pm to 1:30 pm.)

CHAIRPERSON NICHOLS: We are back to close the
meeting. But before we do, I want to report on the
results of the executive session.

The Board met in executive session to receive a
report from our legal counsel on the status of ongoing
litigation. There were no actions required and no
decisions were made.

We also had a discussion about the process for
filling the position of Executive Officer, which will be
vacant soon, and how we will go about doing that.

That's my report on the executive session. With
that, I'll entertain a motion to adjourn.

BOARD MEMBER D'ADAMO: So moved.

BOARD MEMBER RIORDAN: Second.

CHAIRPERSON NICHOLS: I see no descent. We are
adjourned. Thank you very much.

(Whereupon the Air Resources Board adjourned
at 1:32 p.m.)
CERTIFICATE OF REPORTER

I, TIFFANY C. KRAFT, a Certified Shorthand Reporter of the State of California, and Registered Professional Reporter, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Tiffany C. Kraft, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of April, 2013.

______________________________
TIFFANY C. KRAFT, CSR, RPR
Certified Shorthand Reporter
License No. 12277

California Reporting, LLC