

MEETING  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD

CAL/EPA HEADQUARTERS  
BYRON SHER AUDITORIUM  
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THURSDAY, NOVEMBER 20, 2014  
9:10 A.M.

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APPEARANCES

BOARD MEMBERS

Ms. Mary Nichols, Chairperson

Dr. John Balmes

Ms. Sandra Berg

Mr. Hector De La Torre

Mr. John Eisenhut

Mayor Judy Mitchell

Mrs. Barbara Riordan

Supervisor Ron Roberts

Supervisor Phil Serna

Dr. Alexander Sherriffs

Professor Daniel Sperling

STAFF

Mr. Richard Corey, Executive Director

Ms. Lynn Terry, Deputy Executive Director

Dr. Alberto Ayala, Deputy Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

Ms. Jennifer Gress, Legislative Director, Office of  
Legislative Affairs

Ms. Karen Magliano, Assistant Chief, Air Quality Planning  
and Science Division

APPEARANCES

STAFF

Ms. Eileen McCauley, Manager, Atmospheric Processes  
Research Section, Research Division

Ms. Beth White, Manager, On-Road Compliance Assistance  
Section, MSCD

ALSO PRESENT

Mr. Ken Alex, Director, Office of Planning and Research

Mr. Randal Friedman

Mr. Jeff Morales, CEO, High Speed Rail Authority

INDEX

	<u>PAGE</u>
Item 14-9-1	
Chairperson Nichols	3
Motion	3
Vote	3
Item 14-9-2	
Chairperson Nichols	3
Motion	4
Vote	4
Item 14-9-3	
Chairperson Nichols	4
Motion	4
Vote	4
Item 14-9-4	
Chairperson Nichols	4
Executive Officer Corey	5
Director Alex	6
Item 14-9-5	
Chairperson Nichols	38
Executive Officer Corey	39
Legislative Director Gress	40
Item 14-9-6	
Chairperson Nichols	58
Executive Officer Corey	60
Staff Presentation	60
Item 14-9-7	
Chairperson Nichols	80
Executive Director Corey	80
Staff Presentation	81
Motion	88
Vote	89

INDEX CONTINUED

	<u>PAGE</u>
Public Comment Mr. Friedman	89
Adjournment	107
Reporter's Certificate	108



1 BOARD MEMBER ROBERTS: Here.

2 BOARD CLERK JENSEN: Supervisor Serna?

3 BOARD MEMBER SERNA: Here.

4 BOARD CLERK JENSEN: Dr. Sherriffs?

5 BOARD MEMBER SHERRIFFS: Yes.

6 BOARD CLERK JENSEN: Professor Sperling?

7 BOARD MEMBER SPERLING: Here.

8 BOARD CLERK JENSEN: Chairman Nichols?

9 CHAIRPERSON NICHOLS: Here.

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

12 CHAIRPERSON NICHOLS: We certainly do. So nice  
13 to have you all here.

14 I have a couple of announcements I need to make.  
15 Anyone who wishes to testify is asked to please fill out a  
16 request to speak card. They're available in the lobby  
17 outside. And we ask that you give them to the Board  
18 assistant or clerk prior to the item that's called so that  
19 we have a chance to put a list together.

20 We will be imposing a three-minute time limit,  
21 and we appreciate it people will summarize any written  
22 testimony they submitted because we do have the written  
23 testimony. So it's much better if you don't read that,  
24 but just speak it in your own words.

25 I also need to point out the exits at the rear of

1 the room and the sides of the dais. In the event of a  
2 fire alarm, we're to go to the exits and evacuate this  
3 room immediately, go down stairs and outside the building  
4 until we get the all-clear sound. That's the extent of my  
5 official remarks here.

6 So I think we should just get started. Let's  
7 begin with the consent items. We have several of them,  
8 but I think we should probably take them in order. So the  
9 first item on consent is a research proposal. The Board  
10 members have had a chance to look at it. Do we have  
11 anyone who wants to take this off the consent? Anybody  
12 sign up to testify? Okay. Let's just have a motion.

13 BOARD MEMBER MITCHELL: I move approval.

14 BOARD MEMBER RIORDAN: Second.

15 CHAIRPERSON NICHOLS: Very good. All in favor  
16 please say aye.

17 (Unanimous aye vote)

18 CHAIRPERSON NICHOLS: Any opposed? Great.

19 Second item is the greenhouse gas quantification  
20 determination for the Association of Monterey Bay Area  
21 Governments Metropolitan Transportation Plan/Sustainable  
22 Community Strategy. That's a mouthful. Probably almost  
23 as long as the plan.

24 So again, Board Clerk, did any witnesses sign up  
25 to testify?

1           Are there any Board members who wish to have this  
2 taken off consent? If not, we have a motion and a second.

3           BOARD MEMBER BERG: So moved.

4           BOARD MEMBER ROBERTS: Second.

5           CHAIRPERSON NICHOLS: All in favor please say  
6 aye.

7           (Unanimous aye vote)

8           CHAIRPERSON NICHOLS: Any opposed?

9           Any abstentions?

10          Okay. Great.

11          And then the last item on the consent calendar is  
12 an update to the Transportation Conformity budget for the  
13 San Joaquin Valley.

14          And again, any witnesses? No.

15          Any Board members who want to discuss this item?

16          If not, can we please have a motion and a second?

17          BOARD MEMBER MITCHELL: Move approval.

18          BOARD MEMBER RIORDAN: Second.

19          CHAIRPERSON NICHOLS: All in favor say aye.

20          (Unanimous aye vote)

21          CHAIRPERSON NICHOLS: Opposed?

22          Any abstentions?

23          Great.

24          Okay. Now we turn to the business of the  
25 meeting. And I see Ken Alex, the head of the Governor's

1 Office of Planning and Research. We have invited the  
2 Governor's office and the High Speed Rail Authority -- Mr.  
3 Morales, welcome -- to come and give us an update on  
4 what's going on with the High Speed Rail. We thought it  
5 would be good for the Board, because the state's  
6 transportation system is a key economic sector driving  
7 reductions in greenhouse gas emissions and accounts for  
8 almost 36 percent of our total emissions. High Speed Rail  
9 is a key component of the state's future transportation  
10 system, providing the backbone of a more sustainable  
11 growth strategy in the San Joaquin Valley. And of course,  
12 it's one of the many projects that are receiving funding  
13 now from the cap and trade auction proceeds.

14 So I'll turn to our Executive Officer to  
15 introduce this item.

16 DEPUTY EXECUTIVE OFFICER COREY: Yes, thank you,  
17 Chairman Nichols.

18 The State's long-term air quality and climate  
19 vision includes a variety of zero and near-zero  
20 transportation choices that are integrated into an  
21 inner-connected sustainable communities throughout the  
22 state. ARB has a major role in this future.

23 But we also have many partners, including the  
24 High Speed Rail Authority. I welcome today Ken Alex from  
25 the Governor's Office of Planning and Research and Jeff

1 Morales from the High Speed Rail Authority to share with  
2 us their progress on achieving this vision. Ken.

3 DIRECTOR ALEX: Thank you very much, Chairman  
4 Nichols and members of the Board.

5 Thanks for having this item on the agenda.  
6 Obviously, something of substantial importance to the  
7 Governor and to the Office of Planning and Research and to  
8 the Strategic Growth Council and on and on and on.

9 I'm mostly here this morning to introduce Jeff  
10 Morales, which I will do in a minute. But I wanted to  
11 talk a little bit for a couple of minutes about the work  
12 that the Strategic Growth Council and the Office of  
13 Planning and Research are doing in conjunction with High  
14 Speed Rail on a very under-appreciated, yet I think  
15 extremely important part of the value of High Speed Rail.

16 I think most people see High Speed Rail as a way  
17 to move people from north to south and south to north. A  
18 very important piece of what the rail is about, but not  
19 the only piece. As we move to 50 million people in the  
20 state of California, a lot of that growth will be in the  
21 Central Valley. And right now, the Central Valley, which  
22 has, as we know, all kinds of air issues and other kinds  
23 of series of problems is somewhat economically isolated  
24 from the coast. It's also expected to be the area of the  
25 largest growth in population.

1           Right now, we are losing agricultural land at a  
2 pretty frightening rate, prime agricultural land around  
3 cities like Fresno. And the growth patterns and  
4 development patterns are reminiscent of Southern  
5 California in that they tend to be sprawl.

6           So what OPR and the SGC are doing with High Speed  
7 Rail is to work with local governments to work on  
8 stationary planning around High Speed Rail stations to  
9 work on connectivity plans, how do we transport people to  
10 and from High Speed Rail stations, get them out of cars,  
11 think about how we actually preserve open space,  
12 agricultural land, create higher densities in population  
13 areas while we do so with connection to transit. And all  
14 of that is made possible by the backbone of the High Speed  
15 Rail running through this area of central California

16           So just for example, if you think about the city  
17 of Fresno, which will have a High Speed Rail station, it's  
18 about 30 miles from the city of Madera. Right now, you  
19 can only get to the city of Madera by car. We need to  
20 think about that differently, because the proposals for  
21 building and development in Madera County are not in the  
22 city of Madera right now.

23           So this is an opportunity to really think about  
24 how we develop over time in the Central Valley differently  
25 and also to connect to areas like Silicon Valley, which

1 are isolated from the valley and make it an economic  
2 outpost.

3           So with all of that, SGC and OPR have dedicated  
4 personnel staff time to work pretty extensively in the  
5 valley and I think we're making some progress. And Jeff  
6 will talk a little bit more about the progress. So let me  
7 turn to my main function here, which is to introduce Jeff  
8 Morales.

9           Jeff is the CEO of the High Speed Rail Authority.  
10 He has enormous experience, and you'll see why he's the  
11 CEO of the High Speed Rail Authority. He is the former  
12 Director of Caltrans. He was a Senior Vice President at  
13 Parsons Brinkerhoff. He was the Vice President of the  
14 Chicago Transit Authority. He spent a fair amount of time  
15 at the federal level. He was a member of President Elect  
16 Obama's transition team. He was part of Vice President  
17 Gore's national performance review. He was part of the  
18 White House Commission on Aviation Safety and Security and  
19 also worked for a time at the U.S. Department of  
20 Transportation and was part of the U.S. Senate staff. So  
21 he brings all of that to High Speed Rail.

22           So let me turn it over to Jeff.

23           CHAIRPERSON NICHOLS: Good morning.

24           HIGH SPEED RAIL AUTHORITY CEO MORALES: Good  
25 morning. Thank you, Madam Chair. Thank you, Chairman

1 Nichols. Thank you for the chance to be here and make  
2 this presentation.

3 I want to before starting --

4 --o0o--

5 HIGH SPEED RAIL AUTHORITY CEO MORALES: --  
6 recognize one of our Board members, Rick Frank, who is  
7 known well to many of you who is here with us and has  
8 brought a very important perspective to our program and to  
9 ensure that we, in fact, achieve the kind of goals that  
10 Ken has just talked about. So very pleased to have Mr.  
11 Frank here with us today.

12 I want to acknowledge and thank the ARB for its  
13 support and work with us. Chairman Nichols, your work in  
14 leading up to the vote on the cap and trade program this  
15 summer was really indispensable, and that of your staff,  
16 Richard Corey, and others to help make sure that we shape  
17 this program and to implement it in a way that does  
18 achieve the goals of greenhouse gas reduction. And also  
19 we're off to a great start since the adoption of the  
20 budget, putting those cap and trade proceeds to use  
21 already. We're making good progress on that.

22 What I'd like to do today is run through where we  
23 are with the program, how it ties with the goals of this  
24 Board and the state's environmental goals, and then talk  
25 about next steps. Certainly happy to take any questions

1 you may have.

2 --o0o--

3 HIGH SPEED RAIL AUTHORITY CEO MORALES: Very  
4 consistent with what Ken said, we really have shifted the  
5 focus of this program. And much to the consternation of  
6 some of our train buffs and our engineers, I always say  
7 it's really not about the train. It is about what this  
8 system will mean for the state of California going  
9 forward, shaping its growth, helping tying together with  
10 local planning decisions, local development, cities like  
11 Fresno. Many people don't realize Fresno is the same size  
12 as Washington, D.C. and it will be getting bigger, a lot  
13 bigger. It needs different ways of meeting its growth  
14 that's ahead of us. This is one of those  
15 once-in-a-generation transformative investments that will  
16 really make a huge difference to the future of how people  
17 move in the state, how our economy is tied together. And  
18 it is also very significant in that it is the first  
19 infrastructure investment that literally is designed to  
20 and will connect all of the state's population centers.

21 Look at previous investments. They have -- as  
22 Ken alluded, the valley has been isolated. I-5 did not go  
23 to the population centers. It went past the Central  
24 Valley. This system by law will connect all of the  
25 population centers of the state. That in and of itself

1 will have a huge impact on what the state does, ties  
2 together. Not just the Central Valley, with Silicon  
3 Valley, for instance, but even between San Francisco and  
4 San Jose. All those cars on the 101 taking an hour, hour  
5 and a half, two hours to get between San Francisco, San  
6 Jose, a half hour on an electric, non-polluting train  
7 makes a big difference in that region. That's what this  
8 program is about, and that's how we're implementing it.

9 --o0o--

10 HIGH SPEED RAIL AUTHORITY CEO MORALES: Some of  
11 the underlying reasons why I believe and I think it's a  
12 lot of the reason the Governor has embraced and pushed  
13 this program as hard as he has is in many ways we really  
14 don't have a choice. We have to make an investment like  
15 this. And some of the underlying conditions really speak  
16 to that.

17 We have 38 million people in California today.  
18 Will be growing to 50 million over the next few decades.  
19 Our transportation systems cannot meet that demand. And a  
20 few examples, many people don't realize that the L.A. area  
21 to the Bay Area is the busiest air market in the  
22 United States. And that has all sorts of implications for  
23 air quality, for productivity, for economic benefit.  
24 About one out of every five or so flights leaving the L.A.  
25 area airports is coming to northern California. That's

1 not a very efficient way to use airplanes. It's not an  
2 efficient way to use airports, and it has significant  
3 implications in terms of air quality. And I'll talk more  
4 about that in a moment.

5 And one thing I would also point out, you may  
6 have seen there is a little bit of controversy about our  
7 program from time to time and people get a little upset.

8 CHAIRPERSON NICHOLS: Actually, it doesn't seem  
9 that much to us.

10 HIGH SPEED RAIL AUTHORITY CEO MORALES: You're  
11 used to that. But I point out if you think clearing --  
12 essentially clearing and ultimately building two tracks up  
13 and down the state is challenging, imagine what it would  
14 be like to build 4500 lanes -- new lanes of freeway up and  
15 down the state. Because that's what we're talking about  
16 in terms of alternatives. A huge cost difference, but  
17 also huge impacts on the environment and on communities.

18 --o0o--

19 HIGH SPEED RAIL AUTHORITY CEO MORALES: One of  
20 the key benefits of High Speed Rail -- and this has been  
21 proven around the world where it's been implemented but an  
22 example closer to home is mode shift. That is, getting  
23 people out of cars, out of airplanes onto the train.

24 And as a reminder, this system will be  
25 100 percent electric. We have a goal of 100 percent

1 renewable energy powering the system. And that has huge  
2 implications for travel. And we will see as we've seen  
3 around the world a marked shift in how people travel.  
4 It's happened between Madrid and Seville, between Paris  
5 and Leon, between cities in Tokyo, all the cities where  
6 High Speed Rail has gone in, the share of travel on rail  
7 has grown from in some cases less than ten percent to now  
8 90 percent.

9           Sometimes people dismiss that and say that's  
10 Europe or that's Asia and that will never happen in the  
11 U.S. We all love our cars too much. But we've seen the  
12 same thing happen in the northeast when Amtrak introduced  
13 the Acela service, which is the closest thing we have in  
14 this country to High Speed Rail. There is a three-mile  
15 stretch where they get up to 160 miles an hour and  
16 everybody gets excited and then it slows down again.

17           But since they introduced that service, Amtrak's  
18 share of that DC to New York commute market has grown from  
19 37 percent and it's now actually up over 80 percent.  
20 That's real. And the significance of that in part is that  
21 the difference from an emissions perspective between  
22 electric high speed train and airplanes on short distances  
23 is huge, about 1/15th of the emissions result when you  
24 look at the entirety of the system.

25           And we project that when the full system is up

1 and running here, upwards of 200 flights a day between  
2 Southern California and Northern California will be  
3 eliminated as that traffic is moved onto trains. And that  
4 has huge implications for air quality and for  
5 transportation.

6 --o0o--

7 HIGH SPEED RAIL AUTHORITY CEO MORALES: The  
8 system that we are moving forward with is, in fact, a  
9 statewide network. It's a massive investment, one that  
10 doesn't happen very often. But again, it will connect all  
11 of the state's population centers. And the initial  
12 segment Phase I, as it's described in Prop. 1A connecting  
13 San Francisco and Los Angeles, but ultimately the system  
14 will extend to Sacramento and to San Diego. We see all  
15 the points in between. We're moving forward  
16 simultaneously and building this on three areas. In the  
17 peninsula, we as part of our program, the CalTrain  
18 commuter rail system, which is currently a diesel system,  
19 is being electrified and upgraded. That will be  
20 incorporated into our system. Just that segment alone is  
21 projected to reduce starting in about 2020 some 68,000  
22 tons of emissions a year by electrifying that existing  
23 system.

24 At the same time, we have begun the work and  
25 begun the construction in the Central Valley of the

1 dedicated High Speed Rail system. We're underway. Cap  
2 and trade funds are helping move that forward. And we're  
3 working in Southern California now to expedite our work  
4 down there connecting Burbank with Palmdale and making  
5 improvements at Union Station and to the existing commuter  
6 rail system in Southern California that will bring  
7 benefits for commuters today and in the near term and  
8 ultimately become part of our system.

9           One of the goals of the cap and trade program  
10 certainly is amended by its statute is also to create  
11 local benefits in disadvantaged communities, and that's a  
12 very important part of our program. We have incentives  
13 and requirements in our contracts to promote hiring in,  
14 for instance, the Central Valley where unemployment rates  
15 are twice the state average. And we're seeing that begin  
16 to take effect already.

17           We're promoting businesses here in California,  
18 jobs here in California. We have 160 small businesses  
19 already under contract in our program, 28 disadvantaged  
20 veteran businesses under contract. And we see those  
21 benefits accruing, not just for air quality purposes, but  
22 for economic and employment benefits as well.

23                           --o0o--

24           HIGH SPEED RAIL AUTHORITY CEO MORALES: We have  
25 made a lot of progress over the last few years, just a few

1 indications. We have secured federal funds as well as  
2 State bond funds. And now with the support of the  
3 Chairman and others, huge game changer, the securing of  
4 the cap and trade proceeds, 25 percent of those going  
5 forward, which is a critical element of making this  
6 program real and accelerating the benefits that will  
7 happen from this.

8 We secured environmental clearances for the  
9 construction throughout the Central Valley. One of the  
10 most extensive environmental clearances I think it's  
11 probably safe to say ever in this state.

12 And we've also done something else which is very  
13 important, and this is something our Board feels very  
14 strongly about and we as the management people very  
15 strongly about, which is making this program really a  
16 model for how infrastructure can be delivered in the state  
17 as we go forward. We've made a commitment to be zero net  
18 emissions during construction of the program, which I  
19 think you can appreciate a program of this scale is a  
20 massive commitment. One of the ways we're doing that is  
21 through a very important agreement we reached with the San  
22 Joaquin Air Pollution Control District. We just had a  
23 nice event yesterday down in Fresno with EPA Regional  
24 Administrative Jerod Blumenfield and Shamer Shak from the  
25 district to taut that. We are requiring as part of our

1 contracts that all of the equipment be the latest Tier 4  
2 equipment as certified by the EPA, 100 percent recycling  
3 of materials, many other steps to go forward.

4 And we are working through the San Joaquin Air  
5 Pollution Control District to fund their program to make  
6 improvements that will provide near-term benefits that  
7 replacing diesel irrigation pumps, replacing old school  
8 buses, old farm tractors, all things that will contribute  
9 to improved air quality in the Central Valley.

10 As we begin construction, that will last far  
11 beyond when we finish construction. So an important  
12 investment in cleaner air in the Central Valley.

13 --o0o--

14 HIGH SPEED RAIL AUTHORITY CEO MORALES: We  
15 sometimes refer to -- I think people lost sight sometimes  
16 and it's hard -- in many ways, this is an environmental  
17 program. Those are the benefits we'll see.

18 The Central Valley, as Ken noted, we're losing by  
19 some estimates 300,000 acres of farmland a year. The city  
20 of Fresno in its growth over the last few decades has  
21 consumed 50,000 acres by growing outward. That's one of  
22 the reasons the city of Fresno, the Mayor there is so  
23 supportive of High Speed Rail as a way of reshaping the  
24 growth, bring it back downtown, more transit-oriented  
25 development. So our program will be a part of a broader



1                   --o0o--

2                   HIGH SPEED RAIL AUTHORITY CEO MORALES: Cap and  
3 trade I mentioned it is easy to overuse the term "game  
4 changer," but for this program, it is not an exaggeration.  
5 It really is a game changer, and not just for High Speed  
6 Rail. What the Legislature did and what the Governor  
7 proposed was made commitments not just to High Speed Rail,  
8 but to transit to inner-city rail, to affordable housing,  
9 and this is never been done in California. So this is  
10 really changes how we can approach our program and how we  
11 can implement it. But also how our regional and local  
12 transit partners can approach their programs as well.  
13 It's really promoting and creating greater opportunities  
14 for us to tie all those systems together.

15                   --o0o--

16                   HIGH SPEED RAIL AUTHORITY CEO MORALES: And so as  
17 I mentioned, we're moving forward on three steps:  
18 Advancing on the peninsula, building now in the Central  
19 Valley, and beginning the work, the environmental  
20 clearance and moving as quickly as possible to the  
21 construction segment in Southern California, with the very  
22 exciting opportunity to tie into a potential line coming  
23 from Las Vegas into California.

24                   And what we would create then together is not  
25 just a Las Vegas to Victorville or Palmdale, but we're

1 talking about Las Vegas to Los Angeles and Anaheim by  
2 tying those two systems together. Again, a huge  
3 investment. There are something on the order of 19  
4 million trips a year taken out of the L.A. area to Las  
5 Vegas, 17 million by car. If you've done that, that's a  
6 five- to seven-hour trip, depending on traffic and  
7 accidents and other things. Again, lots of people and  
8 lots of cars. With an hour and a half trip by train when  
9 you can gamble and drink on the train on your way to Las  
10 Vegas, no one will drive. So that has huge implications.

11 And that concludes my prepared remarks. I want  
12 to again thank you for your support and your partnership.  
13 And we commit to working with you to make sure this  
14 program does what you want it to do and does what we want  
15 it to do and what the Governor envisions for this as we go  
16 forward.

17 CHAIRPERSON NICHOLS: Appreciate your coming over  
18 and particularly sort of laying out some of the array of  
19 environmental enhancements that I think have not been  
20 getting much attention, but that I can't think of anything  
21 that anyone has suggested could be done in a large scale  
22 construction project that you folks haven't found a way to  
23 incorporate into this project. It's really kind of  
24 amazing from that perspective.

25 This is a real partnership here. ARB has been

1 involved with High Speed Rail I think from the very  
2 beginning of the environmental review process in terms of  
3 just helping to define and articulate what the benefits  
4 were that we were hoping for and how to think about the  
5 air and climate implications of the project. So this is  
6 not something that we just sort of woke up a year ago when  
7 we began to think about spending money and said oh, yeah,  
8 let's put some money into High Speed Rail. There has been  
9 a long term involvement here.

10 But I thought it would be a good opportunity when  
11 things are a little bit quiet around here, relatively  
12 speaking, to give my Board members an opportunity to both  
13 hear and ask some questions. I see one hand at least  
14 already up. So -- two. I'll start with you, John.

15 BOARD MEMBER BALMES: Thanks, Mr. Morales, for  
16 that presentation.

17 I wanted to specifically ask you about the  
18 electrification of the train corridor. I'm from the Bay  
19 Area, and I received actually multiple complaints over the  
20 years about the diesel exposure that the current system  
21 allows. So I just want to make sure that electrification  
22 project is definitely happening and what's the time line.

23 HIGH SPEED RAIL AUTHORITY CEO MORALES: It is  
24 absolutely happening. And we're working in partnership  
25 with CalTrain to do that. Part of the funding we received

1 from the Legislature is funding that program. The  
2 environmental review is scheduled to be concluded right  
3 around the end of this calendar year. And then the  
4 initiation of the electrification will start next year.  
5 And with the target of 2019-2020, depending on exactly --  
6 but that will be conversion to electric trains, clean,  
7 non-polluting trains. And we are working to make sure  
8 that system is fully complimentary with our statewide  
9 system so we can get the full benefits of it.

10 BOARD MEMBER BALMES: Thank you.

11 CHAIRPERSON NICHOLS: Dr. Sherriffs.

12 BOARD MEMBER SHERRIFFS: Thank you. Thank you  
13 for coming. Thank you for your presentation.

14 And I just wanted to highlight the importance and  
15 the value of that partnership with the valley because  
16 obviously we are one of the more troubled areas in terms  
17 of emissions and air quality, the importance of the zero  
18 net emissions commitment and the making available of funds  
19 for incentive programs that have been so important to the  
20 valley, particularly in terms of helping agriculture,  
21 specifically with things like pumps and tractors.

22 And again, emphasizing not just the short-term  
23 commitment to zero emissions during construction. But  
24 when we replace those dirtier tools, there are those  
25 ongoing benefits for the life of that machinery. So thank

1 you very much for that.

2 HIGH SPEED RAIL AUTHORITY CEO MORALES: Thank  
3 you. It's been a great partnership. Not everyone in the  
4 valley is as fully supportive as others. So I know it was  
5 a challenge from the pollution control district's part as  
6 well. But I think it's a critical partnership going  
7 forward. We're committed to making it work.

8 CHAIRPERSON NICHOLS: Yes, Mayor Mitchell.

9 BOARD MEMBER MITCHELL: Thank you.

10 I want to say again how great this program is.  
11 But I think one key part of it is the connection that the  
12 High Speed Rail will make to the inner city systems. I  
13 know that's important both in the Bay Area and in the Los  
14 Angeles area because you can get from L.A. to  
15 San Francisco, but can you get around once you get into  
16 those places? I think that's a real key component of  
17 this.

18 I didn't see in the presentation any time line on  
19 this. Maybe you could elaborate a little bit on what that  
20 time line is for -- I know we have first phase. But what  
21 are the sort of time points that you're looking at?

22 HIGH SPEED RAIL AUTHORITY CEO MORALES: Sure.  
23 Some of that is going through -- we're revising schedules  
24 based on the cap and trade funding, which creates new  
25 opportunities to accelerate some segments. But the

1 general schedule is on the peninsula, again, the  
2 electrification will be underway. The time frame is 2019  
3 to 2020 for that being up and running.

4 Our construction through the Central Valley is  
5 underway. 2018 is the completion of that segment. 2022  
6 is our current schedule to have the system running from  
7 Merced to Burbank. And then by 2029, ultimately the full  
8 San Francisco to Los Angeles segment.

9 Again, we will bring on segments within that as  
10 quickly as we can and as soon as possible to provide  
11 near-term benefits and tie it all together into one system  
12 as we're able to by 2029.

13 BOARD MEMBER MITCHELL: One other question. I  
14 guess this question is who. Who is going to provide the  
15 rail cars? And do we have -- has that been decided?

16 HIGH SPEED RAIL AUTHORITY CEO MORALES: It has  
17 not. We've begun the process. Right now, we're going  
18 through an informal process of outreach to the industry.  
19 And the manufacturers of high speed trains are all  
20 overseas currently. We have active interest from  
21 companies, manufacturers in China, Japan, Korea, France,  
22 Germany, Italy. I'm probably leaving somebody out, the  
23 UK. And we'll have a competition to see where those  
24 trains are -- who provides them.

25 We do -- because we're using federal funds in

1 part we have a "buy America" requirement, which means that  
2 a significant amount of that work, ultimately the assembly  
3 and manufacturing will come to the U.S. We are doing  
4 everything possible to make sure it comes to California,  
5 not just to the U.S. But here in California.

6 BOARD MEMBER MITCHELL: There was another  
7 question. A friend recently pointed out to me the series  
8 of articles in the Atlantic magazine written by Mark  
9 Farrell on High Speed Rail. He's a strong supporter of  
10 that. And I've begun to read those, but I highly  
11 recommend that to everyone to take a look at because it  
12 does find some reasons to do this and how we go forward  
13 with it. So thank you for all your work on this.

14 I think what is not understood well is that this  
15 is more than just a transportation system. It's a  
16 sustainable communities strategy that reaches all through  
17 the Central Valley. So thank you for explaining that. I  
18 think some of us have a hard time talking to our  
19 colleagues who aren't supportive of this project. So I  
20 think if we look at it in that way, it's helpful for them  
21 to understand what we are truly doing here. Thank you  
22 very much for all your work.

23 HIGH SPEED RAIL AUTHORITY CEO MORALES: Thank  
24 you. And I think Jim Fallows' articles have been really  
25 important. One of the things they've done is help put

1 things in the right context and the right perspective.  
2 That's one of the biggest challenges we have is any  
3 program you're going to have near-term disruptions with  
4 property acquisition, with construction, and things like  
5 that. It's very hard to step back and think about why we  
6 are doing this and why we need it and also recognize that  
7 every big program had these challenges.

8 We always point out the Golden Gate Bridge, which  
9 is probably the most iconic structure in California and  
10 one in the country had 2,000 lawsuits filed against it in  
11 the 1930s. And the master plan for higher ed passed by a  
12 single vote in the Legislature. So I think it's hard to  
13 put those things in perspective when you're in the middle  
14 of them. I think those articles have helped broaden that  
15 exposure. We've been very happy to work with them on  
16 that.

17 CHAIRPERSON NICHOLS: Supervisor Serna.

18 BOARD MEMBER SERNA: Great. Thank you, Chairman  
19 Nichols.

20 Thank you to Mr. Morales for being here. I  
21 wanted to extend my thanks in addition to what has already  
22 been said. I think this is important to have this  
23 opportunity to have an exchange.

24 One of the slides that I thought was most  
25 impressive was your best kept environmental benefits

1 slide. And you have a bullet there reinforcing SB 375  
2 stationary planning. And you know, you touched on it.  
3 But I'm wondering whether or not there's been any  
4 concerted effort to date to do a broader  
5 outreach/education program for the general public to  
6 consume that permits them to understand the link between  
7 reducing VMT and what this project will do in that regard.  
8 I think, to date, what we see in the popular media is this  
9 questionmark about how sincere this project is going to be  
10 to reduce GHG emissions based on the duration of time that  
11 has to pass for it to be constructed and then of course  
12 the emissions that go into the actual construction of the  
13 project.

14 But that back end part I think is absolutely  
15 critical especially with regards to SB 375 I haven't heard  
16 that much about. So I'm asking, wondering whether or not  
17 there has been any effort to do that. If not, if there is  
18 any intent to do that.

19 HIGH SPEED RAIL AUTHORITY CEO MORALES: I'll ask  
20 Ken to comment on some of this in a moment. I'll touch on  
21 a few things.

22 One: I think between 2008 when Prop. 1A passed  
23 and then I think 2010/12 when the Governor really kind of  
24 got ahold of the program and exercised his influence on  
25 the Board, I think the authority kind of lost its way and

1 got too focused on the engineering aspects of things and  
2 wasn't conveying that broader message. So as you saw in  
3 our presentation, it's really we think that sort of  
4 outreach and education is absolutely critical because  
5 that's what this program really is about.

6 We are -- among the things we're doing to help SB  
7 375 achieve goals SB 375 goals is providing planning  
8 grants to the cities where our stations will be because we  
9 don't control those decisions, what local development  
10 looks like. But for our system to succeed, we need there  
11 to be coordinated sound planning. So we're providing  
12 funding to the cities to help them do that. And we're  
13 taking a number of steps through the Strategic Growth  
14 Council as well, which Ken can elaborate on.

15 DIRECTOR ALEX: Thank you for that question. I  
16 think it's right on point. As Jeff says, we have not been  
17 great about it in the past and are making a very big  
18 effort to change that. So High Speed Rail is funding  
19 Susan Hauge at the Strategic Growth Council. Her full job  
20 is to work with local communities, local governments in  
21 the Central Valley, stationary planning and related. And  
22 she's terrific. And if anybody would like to have her  
23 come talk in their community, she's absolutely available  
24 to do that.

25 We also were doing a bi-weekly meeting with Kate

1 White and others from the Transportation Agency and High  
2 Speed Rail and Strategic Growth Council and the Governor's  
3 Office on exactly the issue that you're raising. How do  
4 we change the discussion and how do people perceive the  
5 benefits of the rail for the Central Valley. I think  
6 we're making some progress. We're seeing articles now  
7 that actually are somewhat more balanced.

8 I think that there are counties like Fresno, city  
9 of Fresno that have been supportive that continue to be.  
10 We're seeing places where we now know the train seems to  
11 be much more inevitable than perhaps it was a year or two  
12 ago and that we're seeing a different piece of dialogue.

13 I think the James Fallows articles that Mayor  
14 Mitchell mentioned have been helpful. We're spreading  
15 those far and wide. We're looking for more and more  
16 opportunities. We're actually trying to remind  
17 environmental groups that they supported Prop. 1A years  
18 ago and that they should remember why and they should help  
19 us talk about those.

20 So we are very open if any Board members, if you  
21 have suggestions for how to better do that, we are  
22 absolutely committed to it. And we are certainly talking  
23 to all the metropolitan planning organizations about how  
24 to integrate this into the 375 process.

25 BOARD MEMBER SERNA: I'm glad you ended on that

1 note. You mentioned cities a number of times. But you  
2 know, there are some larger MPOs that are going to  
3 probably capture more than one city within their  
4 territory. It seems like that would be a logical  
5 construct to work with in terms of advancing that  
6 opportunity to plan around stations more intelligently.

7 HIGH SPEED RAIL AUTHORITY CEO MORALES: That's  
8 true up and down the state. We haven't talked about  
9 Sacramento. We're working with SACOG, with the City, with  
10 the County and making sure that even though the High Speed  
11 Rail system will be a little later getting here problem,  
12 there's lots of investments that will be made in the near  
13 term. And we need to make sure we plan for the long term.  
14 SCAG has been hugely supportive in Southern California of  
15 the program. High Speed Rail for the long run is a key  
16 element of attainment for them of air quality. We're very  
17 much working in partnership with SCAG and other MPOs all  
18 over the state.

19 BOARD MEMBER SERNA: Thank you.

20 CHAIRPERSON NICHOLS: Ms. Berg.

21 BOARD MEMBER BERG: Thank you.

22 Good morning.

23 I, too, want to express my appreciation for this  
24 presentation because I'm probably one of the citizens that  
25 had not been able to think about the High Speed Rail in

1 this framework. So much appreciated. So I'd like to  
2 piggyback on the comments that Supervisor Serna just made  
3 and also look at the outreach from a public perspective.  
4 And specifically when we're starting to talk about goals  
5 like zero net emission for construction and other  
6 environmental goals, how are we going to be transparent,  
7 what tools are we going to use specifically so that we can  
8 reach out to the citizens of California and ultimately be  
9 a role model for other types of projects that you also  
10 alluded to that we could be a good role model for other  
11 types of construction projects like that. So  
12 specifically, what kinds of things are we looking at in  
13 establishing what emissions would there have been and how  
14 did we curb those, just as an example. Of course, you  
15 have a laundry list of other examples. So thank you very  
16 much.

17 HIGH SPEED RAIL AUTHORITY CEO MORALES: Thank  
18 you. That scenario where we would very much like to work  
19 with the ARB to go forward because I think in some  
20 respects you may be a better messenger of some of those  
21 things than we are. But we have a number of things. The  
22 event I mentioned yesterday we did in Fresno with EPA and  
23 with the San Joaquin Air District was one step in that  
24 direction of trying to provide that broader information to  
25 the public.

1           We have a number of reports that we issue to the  
2     Legislature and others where that sort of information will  
3     be captured. We also have made a -- signed onto a  
4     sustainability program through the American Public  
5     Transportation Association, which represents the transit  
6     agencies to provide an annual sustainability report, which  
7     will capture a lot of this information.

8           But again, I would very much like to continue to  
9     work with the ARB to look at the best way of getting that  
10    sort of information out and capture it in a broader  
11    context as well. I think Ken may have something to add  
12    also.

13           DIRECTOR ALEX: So another staff person that High  
14    Speed Rail is funding at the Strategic Growth Council is a  
15    fellow named Denny Grossman, who is working on something  
16    that we used to call RAMP, Regional Advanced Mitigation  
17    Planning, but we are going to move on from that.

18           The idea of that is I think very much what you  
19    describe. This is a large infrastructure project. We  
20    know it has impacts. What if we think about mitigating  
21    those impacts not just piece by piece, project by project,  
22    but think about what are the things that could be done  
23    from a systemic or regional perspective to have the most  
24    impacts because we know they're going to be other  
25    infrastructure projects. So what if we tie those to

1 things like county -- what are sometimes called green  
2 prints where you identify the areas of habitat of open  
3 space for agriculture and mitigate on a regional basis.

4 And Denny is moving forward specifically with  
5 High Speed Rail, but the idea will be to use this as a  
6 project for pilot purposes and for infrastructure projects  
7 going forward in the state of California to use this as a  
8 model to say let's think more regionally and let's  
9 mitigate in a different kind of way and maybe think about  
10 CEQA compliance in a different way for those kinds of  
11 projects as well. So I think it's exactly what you were  
12 talking about.

13 BOARD MEMBER BERG: Just a follow up. It could  
14 be also a role model for other types of programs that  
15 we're trying to do, like sustainable freight where we  
16 don't know -- it is visionary. And so all these pieces  
17 are great learning pieces, as long as we can figure out  
18 how to share our learning as we go forward. So thank you  
19 very much because this is one piece that you gave us to be  
20 able to understand better. Thank you.

21 CHAIRPERSON NICHOLS: So documentation and  
22 dissemination of the information is a piece that I think  
23 we could partner on. And that would be useful I think for  
24 both of us.

25 Professor Sperling.

1           BOARD MEMBER SPERLING: Hello. I have one  
2 suggestion and one question. You know, one is following  
3 up a little bit on this idea about the local planning and  
4 the SB 375 process. I've mentioned to you, Jeff, this  
5 idea that we need some innovative creative thinking about  
6 how to access these stations that in California with our  
7 land use patterns, the fixed guideway, fixed schedule type  
8 conventional transit services really aren't going to work  
9 very well in most of these communities connecting up the  
10 High Speed Rail.

11           And now with all these information technologies,  
12 there is a lot of opportunities for real time,  
13 demand-responsive-based type services. And there is a few  
14 companies just starting to play around with that idea. So  
15 kind of the suggestion is, you know, there is an  
16 opportunity to reinforce and support that, instead of  
17 locking into other investments, you know, and agreements  
18 with conventional services that might not be in the  
19 interest of what you're trying to do or in the  
20 communities. So you know, I think I mentioned to you I've  
21 been talking to the San Joaquin MPOs as well about this.

22           The question is, you know, going forward, you add  
23 up all the numbers in terms of the amount of money that  
24 you see coming in. And clearly, it falls short of what's  
25 needed. And the challenge is when you're looking at a big

1 project that has large societal benefits, but has large  
2 costs up front, we look at it in terms of our electric  
3 vehicles and fuel cell vehicles. We're looking at costs  
4 of maybe 100 -- nationally about \$100 billion more or less  
5 additional cost of vehicles and infrastructure over the  
6 years to really get to a cost competitive position. So we  
7 know at the end there's going to be large benefits.

8 But \$100 billion sounds like a big number, but in  
9 terms of how much money we spend on fuel and vehicles, you  
10 know, it's a drop in the bucket. I know it's hard for  
11 people to get their heads around that.

12 CHAIRPERSON NICHOLS: A large drop.

13 BOARD MEMBER SPERLING: But for government, it's  
14 a huge number. That's the challenge.

15 And so you have the same challenge with the High  
16 Speed Rail is how do you get over the hump. So what is --  
17 kind of what is -- I know you don't have definitive plans,  
18 but what is the thinking for how to get over the hump?

19 HIGH SPEED RAIL AUTHORITY CEO MORALES: A few  
20 things. On your first point -- and we have talked about  
21 it and I agree completely. I think that's an area where  
22 California can bring a different perspective to this or  
23 European or Asian cities where they looked at fixed  
24 transit systems. That's part of the equation. But we can  
25 look at everything from Hoover to the Google car to

1 whatever tie all those things together and get the point  
2 is mobility and more efficient mobility. So I think we're  
3 looking at all those areas. And like to keep working with  
4 you on that.

5 On your second piece, a few things. One, we have  
6 done extensive analysis -- cost benefit analysis to put  
7 the numbers in perspective in terms of what the state as a  
8 whole, what the country gets back for the ultimate  
9 investment. And that's part of the equation.

10 But then in terms of delivering the program, we  
11 also are breaking the system into segments and looking at  
12 how we can deliver pieces of it with independent utility  
13 as soon as possible so it's really not about a \$68 billion  
14 program. It's about the pieces that ultimately get you to  
15 that over time.

16 And one of the very important things about the  
17 cap and trade commitment and the fact it was done through  
18 a continuous appropriation means we don't have to come  
19 back and get it each year is that that has fundamentally  
20 changed our dialogue with the private sector now in terms  
21 of delivering this program. They've always looked at this  
22 program and said it makes sense, you know, because of  
23 population, because of demand, everything else. The  
24 question was the timing issue for when they could get  
25 involved. The continuous appropriation of the cap and

1 trade now really lets us look at a whole different  
2 partnership and potentially on a different time scale with  
3 the private sector. It's very big significant private  
4 sector investment in this program as well in exchange for  
5 the long-term operating rights of the system.

6 So the total price tag is:

7 A, it's for an entire system.

8 B, it covers all costs, both public and private  
9 because of how we had it reported.

10 And then I guess the third element I would say is  
11 we are continually looking at ways of bringing that cost  
12 down, and I'm confident we can do that. There's  
13 significant savings and efficiencies that we can gain as  
14 we deliver the program that will make it easier.

15 CHAIRPERSON NICHOLS: Okay. I think we had a  
16 good discussion here. I just want to say, wrapping this  
17 up, that it really is an amazing opportunity. I think  
18 we've all tended to kind of lower our voices a little bit,  
19 because as Dan pointed out, it is a huge undertaking. And  
20 any time you do something really big, there are going to  
21 be people who are going to raise objections and there's  
22 going to be concerns and potential pitfalls.

23 But this is actually moving forward on a project  
24 of great magnitude and great importance for the future of  
25 the state of California. And the opportunity to be a part

1 of something like this, where instead of doing what we do  
2 with most of our work here at ARB, which is really  
3 cleaning up after bad decisions on land use and  
4 technology, we are a part of doing something which is  
5 going to shape the future of the state for many years to  
6 come and give us an opportunity to do it right.

7 So it's really a pleasure to be able to be part  
8 of it. And I just want to again appreciate the changes  
9 that you've brought to the project in terms of the  
10 openness and the willingness to consider all of our  
11 suggestions and implement some of them before we even  
12 thought of them. So hope to keep up the conversation.

13 Thank you.

14 HIGH SPEED RAIL AUTHORITY CEO MORALES: Thank you  
15 very much.

16 CHAIRPERSON NICHOLS: We have more work to do  
17 here. Next item is also a report, just an opportunity to  
18 reflect on this year's legislation. So we'll bring up our  
19 legislative team and talk about what we did this year.

20 It was a good year overall for climate and air  
21 quality in the Legislature. We saw a focus on and a lot  
22 of support for reducing short-lived climate pollutants and  
23 strengthening incentives for electric vehicles. In  
24 addition, as part of the Budget Act, the Legislature  
25 developed a framework for the expenditure of cap and trade

1 auction proceeds, as we just heard, that not only effected  
2 the appropriations for this year, but will shape the  
3 appropriations in years to come, including obviously the  
4 key investments in transit, High Speed Rail, zero emission  
5 vehicles, and sustainable communities. These investments  
6 will help to reduce greenhouse gas emissions in the state,  
7 spur the development of clean technology, and reduce our  
8 reliance on fossil fuels, delivering tangible benefits to  
9 California communities and in particular focusing on the  
10 needs of disadvantaged communities.

11 So, Mr. Corey, do you want to introduce this  
12 item?

13 DEPUTY EXECUTIVE OFFICER COREY: Yes. Thank you,  
14 Chairman.

15 With the finalized spending plan of the budget  
16 for cap and trade auction proceeds, the investment phase  
17 of the program's underway. And we're working with our  
18 partners and other agencies, including High Speed Rail  
19 Authority, who you just heard from, to develop and  
20 implement projects that further reduce greenhouse gas  
21 emissions.

22 And last year, we secured funding  
23 re-authorization for some key incentive programs,  
24 including the Air Quality Improvement Program and the Carl  
25 Moyer Program. This year, the Legislature showed

1 continued support for vehicle incentive programs with the  
2 focus on heavy-duty sector and extending the reach of  
3 those programs to a broader diversity of Californians.  
4 This support strengthens ARB's efforts to reduce air  
5 pollution and greenhouse gas emissions.

6 And now our Legislative Director, Jennifer Gress,  
7 will give us the year in review, go over key legislation,  
8 and highlight potential areas of legislative interest this  
9 next year.

10 Jennifer.

11 (Whereupon the following slide show presentation  
12 was made.)

13 LEGISLATIVE DIRECTOR GRESS: Thank you.

14 Good morning. It is a pleasure to present the  
15 2014 legislative update. As I prepare the update, I try  
16 to think of one or two adjectives that sum up the year.  
17 For 2014, the words that stand out are "calm" and  
18 "constructive." Members of the Legislature were engaged  
19 and expressed their views on major issues facing the  
20 Board, particularly the Clean Vehicle Rebate Project and  
21 inclusion of fuels in the cap and trade program. And  
22 there were a number of bills that sought to support or  
23 expand our work, including bills to promote zero emission  
24 technologies, control short-lived climate pollutants, and  
25 establish a process for setting a midterm greenhouse gas

1 reduction target.

2 --o0o--

3 LEGISLATIVE DIRECTOR GRESS: What happened in  
4 2014? A little more than 2200 new bills were introduced,  
5 1300 survived the legislative process, and about 1178 of  
6 those were signed by the Governor.

7 The Legislative Office tracked a total of 356  
8 climate and air quality related bills, which included 234  
9 new bills introduced this year, plus 122 two-year bills  
10 that remained viable from 2013.

11 Of those 356 bills, 88, about 24 percent, reached  
12 the Governor's desk and the Governor signed 77.

13 I note that despite the large number, only a  
14 handful of bills prescribed specific responsibilities for  
15 ARB. Your packet includes a table describing the bills  
16 that require ARB to undertake a new activity.

17 We participated in five informational hearings  
18 and one town hall meeting, which is a lower number than in  
19 recent years. This is not to say that we were not  
20 involved in a large number of hearings. The lower number  
21 of informational hearings was offset by an unusually high  
22 number of budget hearings, about 11 in total. This year  
23 was the first year the Legislature and administration  
24 considered an expenditure plan for cap and trade auction  
25 proceeds, which prompted several hearings on the



1 CEQA, vehicles, climate, and other.

2 While climate represented a small category  
3 overall, bills in this category required more of our time  
4 and resources relative to other bills as they were often  
5 higher profile or directly impacted in ARB programs.

6 The most significant topics addressed in  
7 legislation introduced this year included zero emissions  
8 vehicles, the cap and trade regulation, the expenditure of  
9 cap and trade auction proceeds, short-lived climate  
10 pollutants, and AB 32 authority post-2020.

11 I will turn now to describe a few key bills in  
12 each of these areas.

13 --o0o--

14 LEGISLATIVE DIRECTOR GRESS: Eleven bills were  
15 introduced specifically related to zero emission vehicles  
16 and six made it through the Legislature and were signed by  
17 the Governor.

18 AB 2013 increased the number of green stickers  
19 from 55,000 to 70,000 that DMV may issue to plug-in hybrid  
20 electric vehicles to access high occupancy vehicle lanes.

21 AB 2414 clarified that charging for electric  
22 vehicles in public parking lots does not constitute a gift  
23 of public funds, which had been a barrier for some people  
24 to take advantage of free charging.

25 AB 2565 prohibits property owners from denying

1 their tenants the ability to install charging stations on  
2 the property, provided certain conditions are met.

3 The two most significant bills supporting zero  
4 emission vehicles were SB 1204 by Senator Lara and SB 1275  
5 by Senator De Leon. SB 1204 established a Clean Truck,  
6 Bus, and Off-Road Vehicle and Equipment Technology Program  
7 to fund the development, demonstration, pre-commercial  
8 pilot and early commercial deployment of zero and near  
9 zero emission vehicles and equipment.

10 The projects potentially eligible for funding  
11 under this program are for the most part consistent with  
12 ARB's vision for spending its low carbon transportation  
13 funds, and the bill gives ARB flexibility to determine  
14 which projects to fund in our annual funding plan.

15 SB 1275, also known as the Charge Ahead  
16 California Initiative, establishes a goal to place in  
17 service one million electric vehicles in California by  
18 2023, and requires ARB to establish programs designed to  
19 get zero emission technologies into lower-income and  
20 disadvantaged communities. The programs identified in the  
21 bill are consistent with the pilot programs that ARB  
22 proposed and it's implementing through the 2014-15 funding  
23 plan, including car sharing, increased voucher amounts for  
24 cleaner vehicles, and financial assistance.

25 SB 1275 also requires ARB to conduct market and

1 technology assessments as part of each annual funding plan  
2 and mandates that ARB establish an income cap for the  
3 Clean Vehicle Rebate Project.

4 --o0o--

5 LEGISLATIVE DIRECTOR GRESS: A second area of  
6 significant legislative activity concerned cap and trade.  
7 Seven bills were introduced to amend the cap and trade  
8 regulations, mostly intended to ease requirements for  
9 compliance. Bills considering removing fuels from the Cap  
10 and Trade Program generated a significant amount of  
11 publicity but did not get far in the legislative process.

12 AB 69 and SB 1079 attempted to delay inclusion of  
13 fuels under the Cap and Trade Program, while Senator  
14 Steinberg's SB 1156 sought to replace fuels under the cap  
15 about a carbon tax on transportation fuel.

16 Other bills sought to allow offsets approved in  
17 any part of the world to be used for compliance, limit the  
18 amount of reporting the ARB, exempt certain fuel suppliers  
19 from the program, and require that gas stations post the  
20 estimated cost of compliance with the cap and trade on the  
21 fuel pump.

22 --o0o--

23 LEGISLATIVE DIRECTOR GRESS: This legislative  
24 year was a defining year for cap and trade auction  
25 proceeds. As part of the 2014 Budget Act, the Legislature

1 approved the first expenditure plan for auction proceeds.  
2 In addition, 14 bills were introduced on this topic and  
3 six were signed. Of those 14, the majority aimed to  
4 establish new programs. Most of those efforts stalled in  
5 the Legislature.

6 The most far-reaching bill was SB 862, which was  
7 a budget trailer bill. SB 862 established a long-term  
8 framework for the ongoing expenditure of cap and trade  
9 funds with transit, affordable housing, sustainable  
10 community projects, and High Speed Rail slated to receive  
11 a total of 60 percent of auction proceeds each year.

12 The bill also established programmatic frameworks  
13 for several programs receiving proceeds and gave ARB a  
14 defined roll in the administration of the overall program.

15 Specifically, the bill requires ARB to develop  
16 guidance on greenhouse gas reporting and quantification  
17 methods and to develop funding guidelines for  
18 administering agencies that receive appropriations from  
19 the greenhouse gas reduction fund.

20 --oOo--

21 LEGISLATIVE DIRECTOR GRESS: The Legislature also  
22 lent support to ARB's effort to control short-lived  
23 climate pollutants. Short-lived climate pollutants such  
24 as methane are powerful climate forcers that remain in the  
25 atmosphere for a much shorter period of time than

1 longer-lived climate pollutants such as carbon dioxide.  
2 Their relative potency when measured in terms of how they  
3 heat the atmosphere can be several times greater than that  
4 of carbon dioxide.

5 The Legislature recognized that reducing these  
6 emissions can make an immediate beneficial impact on  
7 climate change.

8 SB 605 by Senator Lara directs ARB to develop a  
9 plan to address short-lived climate pollutants by January  
10 1, 2016, which is consistent with our recommendation in  
11 the Scoping Plan update.

12 And SB 1371 by Senator Leno requires the PUC in  
13 consultation with ARB to adopt rules and procedures to  
14 minimize methane leaks from the natural gas pipeline  
15 system.

16 --o0o--

17 LEGISLATIVE DIRECTOR GRESS: Four bills were  
18 introduced this year related to the development of the  
19 greenhouse gas reduction targets post-2020, but none were  
20 approved by the Legislature this year. The two most  
21 prominent bills were AB 2025 and SD 1125.

22 AB 2050 by Assembly Member Quirk would have  
23 required ARB to develop a proposal for further reducing  
24 greenhouse gas emissions by 2050, including intermediate  
25 goals by January 1, 2016.

1           SB 1125 by Senator Pavely would have required ARB  
2 in consultation with the Climate Action Team and other  
3 relevant agencies and stakeholders to develop greenhouse  
4 gas emission and short-lived climate pollutant reduction  
5 targets for 2030 for purposes of informing legislative  
6 action on this topic.

7                           --o0o--

8           LEGISLATIVE DIRECTOR GRESS: Looking ahead, with  
9 fuels subject to cap and trade in January, we expect to  
10 see continued legislative focus on that issue. We will  
11 need to continue our efforts to educate members on that  
12 Cap and Trade Program. While none of the bills on  
13 post-2020 targets survived this year, many members  
14 continue to be interested in legislating in this arena,  
15 and the Governor has signaled that he would like a midterm  
16 target to be established.

17           We also expect discussions to continue about the  
18 use of auction proceeds from cap and trade. While SB 862  
19 provided the blueprint for ongoing expenditures of 60  
20 percent of the funds, I anticipate that members will  
21 continue to be interested in determining how to spend the  
22 remaining 40 percent.

23           Finally, next month, staff will present to you  
24 the results of a working group process that ARB and the  
25 California Air Pollution Control Officers Association

1 convened to identify potential changes to the Carl Moyer  
2 Program. I anticipate that many of the recommendations  
3 will require legislation, and it is possible that we will  
4 see legislation on this in the coming year.

5 --o0o--

6 LEGISLATIVE DIRECTOR GRESS: The November  
7 elections brought many new faces to the Legislature. This  
8 coming legislative class will be one of the least  
9 experienced in California's history, in particular for the  
10 State Assembly. Over one-third of the Assembly will be  
11 composed of new members, and the average number of years  
12 of legislative experience for an Assembly will be 1.6.  
13 Ten years ago, Assembly members had an average of 4.3  
14 years of legislative experience.

15 In the Senate, there will be 16 new members, six  
16 of which will be new to the Legislature without having  
17 first served in the Assembly. Senators will have an  
18 average of 6.3 years of legislative experience, which is a  
19 little down from 9.1 years in 2004.

20 I note that newer Assembly members voted on SB 32  
21 and only seven Senators, did although that number shrinks  
22 to six in January when Assembly Member Walters goes to  
23 Congress.

24 --o0o--

25 LEGISLATIVE DIRECTOR GRESS: Of course, I don't

1 do all this work on my own. I rely on outstanding staff,  
2 specifically, Sam Wade, who is the Deputy Director for  
3 Legislative Affairs; Robin Neese, our Executive Assistant;  
4 and the analysts, Ken Arnold, Dominic Bulone, Danielle  
5 Fasse, Nichole Sotak, and Steve Trumbly.

6 Sydney Vergis also had excellent work in the  
7 Legislative Office this year, as well as ARB's Executive  
8 Fellow Ross Zelen.

9 I'd like to specifically recognize Dominic Bulone  
10 and Nicole Sotak, who both received Superior  
11 Accomplishments awards from ARB this year for their work  
12 in 2013. It's very well deserved.

13 --o0o--

14 LEGISLATIVE DIRECTOR GRESS: Copies of the  
15 legislative summary are in your packet and can also be  
16 accessed on our website. The legislative summary contains  
17 brief descriptions of the most pertinent legislation  
18 tracked by the legislative office, listed by subject,  
19 author, and bill number.

20 That concludes my presentation. I would be happy  
21 to answer any questions.

22 CHAIRPERSON NICHOLS: Thank you very much,  
23 Jennifer.

24 I think your characterization of calm and  
25 constructive was a good one. I wish all years was calm

1 and constructive. That would be an ideal. Certainly  
2 we're going to see some excitement next year around, in  
3 particular, the setting of midterm target. The Governor's  
4 already indicated immediately after he was re-elected he  
5 intends to work on that and that he's going to be working  
6 with the Legislature. I've already been getting questions  
7 from members and others about what exactly that's going to  
8 look like. I have been able to truth truthfully I have no  
9 idea. But we are, in fact, going to be I think doing some  
10 pretty intense work within the administration to try to  
11 come up with answers to how to proceed on this because  
12 there is a general recognition that now that 2020 is just  
13 around the corner and we're clearly on track to meet it,  
14 but now we have to look beyond that. So I think next year  
15 maybe a little less calm, but hopefully equally  
16 constructive.

17 And I had a couple Board members who wanted to  
18 comment. So first Dr. Balmes.

19 BOARD MEMBER BALMES: I just wanted to follow up,  
20 Jennifer, with Chairman Nichols' comments about the  
21 post-2020 authority.

22 I see that the two bills, one in the Senate and  
23 one in the Assembly, died. Did they die because everybody  
24 is waiting for the Governor? Or I hope it didn't  
25 represent sort of a general unwillingness on the part of

1 the Legislature to look beyond 2020.

2 LEGISLATIVE DIRECTOR GRESS: No. I think there  
3 is a lot of interest in the Legislature in looking beyond  
4 2020. But there are a lot of issues that come up when  
5 folks start thinking about how to proceed post-2020. And  
6 I think last year was the time to begin those  
7 conversations but wasn't enough time. I don't think  
8 everyone in the Legislature and I don't think the  
9 administration were fully ready to engage in a full-on  
10 decision-making process around them.

11 CHAIRPERSON NICHOLS: Yes.

12 BOARD MEMBER SPERLING: Actually, my question is  
13 for you.

14 CHAIRPERSON NICHOLS: Okay. That's fair.

15 BOARD MEMBER SPERLING: What is your thinking  
16 just generally about the process about moving forward? I  
17 mean, assuming the Governor makes this statement about  
18 what he thinks the appropriate targets are and however it  
19 plays out in the Legislature, what does it mean for us on  
20 the Board in terms of the time frame? As you said, 2020  
21 is cutting it very close.

22 CHAIRPERSON NICHOLS: Right. Well, a couple of  
23 pieces that will help perhaps pull this all together.  
24 First of all, it's already the Governor himself and others  
25 on his behalf have said in response to a report from

1 Little Hoover Commission last year that there is an  
2 expectation that we will do a midterm update to the  
3 Scoping Plan. As you know, we just did our first update  
4 to the Scoping Plan as a Five-Year Plan. But as part of  
5 the effort to produce a more clearly coherent integrated  
6 energy plan for California, the vehicle for doing that is  
7 going to be the AB 32 Scoping Plan, because it's come to  
8 be seen as the most comprehensive document that the State  
9 has that articulates the path that we're on with respect  
10 to all the things that effect climate. And it also  
11 reflects a policy which this administration has reinforced  
12 in a number of different ways that while energy security,  
13 energy reliability, affordability, et cetera, are all  
14 necessary elements for our energy policy, that the  
15 overarching metric for our success is greenhouse gas  
16 emissions.

17 So there is a commitment on the part of all of  
18 the agencies that deal with these topics to be part of the  
19 overall plan for moving forward to make our state as  
20 resilient and as progressive as we can be with respect to  
21 the climate goals. So that's one fact.

22 Another fact I think is that we want to make sure  
23 that whatever target we set is science based and is also  
24 one that is consistent with international efforts, because  
25 California, despite the fact again that the U.S.

1 government has not been able to pass legislation in this  
2 area, clearly the President is determined to move forward.  
3 And he's already made an announcement in advance as to  
4 what he thinks the U.S. target should be in terms of our  
5 position with international negotiations. So whatever it  
6 is we do here in California needs to be cognizant of our  
7 role in all of these other proceedings as well.

8 In terms of timing, I think the hope is that next  
9 year there could be legislation, whether it's  
10 free-standing legislation or through the budget process or  
11 both because these things sometimes can go in both  
12 directions. But we're going to have to start work very,  
13 very quickly on whatever it is.

14 And so there's going to be some intensive  
15 conversations going on I think within the Governor's  
16 office and between the Governor and legislative leadership  
17 about how to tee up these various pieces. But I think  
18 there is a general sense that this coming year will be a  
19 year of action on this front.

20 So other than that, I get the same question that  
21 you just asked me all the time. And you know, I think we  
22 can sort of see some -- we can see some pluses and minuses  
23 of different approaches ranging from legislators who would  
24 like to themselves set the target to people who think they  
25 should just put in a very simple amendment to AB 32 that

1 says do more, you know. And ARB, you go figure it out and  
2 tell us what the answer is. And so I don't think we know  
3 for sure yet how that will all play out.

4 But I think there is a general sense that  
5 following on with what Ms. Gress just said, we do have a  
6 new Legislature, particularly a new assembly. They want  
7 to own this program. They know it's big. They know it's  
8 important. They know it's a hallmark of California, and  
9 they want to be part of whatever is happening. And they  
10 should be. As a co-equal branch of government, they  
11 should be.

12 So it's really just a question I think of how  
13 best to engage them to the extent that they are interested  
14 and have time. And it may well be that we'll see both  
15 sort of a generic target setting and then some -- a  
16 package of other legislation that would deal with some of  
17 the specific areas that we are really just beginning to  
18 tackle in a comprehensive way in the updated Scoping Plan,  
19 including agriculture and water.

20 We focus a lot on electricity and transportation,  
21 not that we have all the answers there. But we're way  
22 farther along in terms of the analytical work and the  
23 actions in those areas than we are in the natural  
24 resources side, for example, which we also know we need to  
25 be dealing with. So a lot of thinking to be done.

1           And it's hard, as you well know, with a Board  
2 that meets once a month and has actions that we have to  
3 take to sort of engage in the planning of all of this at  
4 the Board level, but I know our staff is doing a lot of  
5 thinking about these issues and really welcomes input and  
6 engagement with the Board. So we should think about what  
7 sorts of workshops and other activities we should be doing  
8 to help make sure that we've had an opportunity to hear  
9 the thoughts of all the Board members on these ideas as  
10 well.

11           BOARD MEMBER SPERLING: I would just comment that  
12 one level down where we're operating below the Legislature  
13 and the Governor, every one of these programs, there is a  
14 huge effort that's going to have to go take place for us  
15 in terms of what do we do with LCFS, what do we do with  
16 the Cap and Trade Program, you know, and some of these  
17 other programs as well as agriculture.

18           CHAIRPERSON NICHOLS: We just implement.  
19 Governor Schwarzenegger used to always say when I appeared  
20 with him at events around climate, "I get to do the fun  
21 stuff. I sign the big legislation. She has to actually  
22 go implement it." That means all of you, not just me.

23           BOARD MEMBER SPERLING: That's my point.

24           CHAIRPERSON NICHOLS: Yes.

25           BOARD MEMBER MITCHELL: I just want to recognize

1 Ms. Gress and the wonderful work she does and the  
2 wonderful work your staff does. For the four of us that  
3 were confirmed last year by the Senate and we got a really  
4 wonderful opportunity to work with Jennifer over a period  
5 of time and we appreciate all that you did for us to help  
6 us get confirmed and to learn all about the programs that  
7 ARB does.

8           And another comment is that we note that there is  
9 a third of the Legislature that's coming in is brand-new.  
10 And many of them came from local government. I was in the  
11 hotel lobby last night, and six people came up to me and  
12 said, "Hi." You know, I knew them from local government  
13 activities. So I think that as we work on greenhouse gas  
14 reduction, you know, we want that start from local  
15 government and go up. So I think we have some good  
16 opportunities here with our new legislators.

17           CHAIRPERSON NICHOLS: Yes. I think this is a  
18 great opportunity to take advantage of our local  
19 government Board members when it comes to helping to  
20 educate and build relationships with the Legislature. And  
21 we will definitely draft you into service and take  
22 advantage of that history and background that you have.

23           Any other questions? Comments?

24           We had nobody signed up to talk on this item. So  
25 if not, we'll thank you for a really good year. Thanks to

1 all of you. Thanks for your hard work. This is a group  
2 that really is a hard working group, but they somehow  
3 managed to have fun, too. It's a good model for all of  
4 us.

5 CHAIRPERSON NICHOLS: The last item on our agenda  
6 is one that everybody will be quite familiar with, which  
7 is the Truck and Bus Regulation -- oh, no, field studies.  
8 I missed it. Let's hear the staff report on the  
9 California Air Quality Field Studies and new science  
10 that's been coming out of these studies. Apologize for  
11 having skipped over this.

12 While the staff are assembling here, this is just  
13 an informational report. But it's one that again I think  
14 is worth updating ourselves on here because it builds on a  
15 long history of doing this type of atmospheric work in  
16 partnership with the local air districts and other  
17 agencies. And it reflects once again the importance of  
18 this kind of science for the development of our programs.

19 I can take just a minute to reflect that I was in  
20 India last week. I was there as a member of a dialogue on  
21 climate that has been going on for some years but I'm new  
22 to. It was a very exciting time to be in India because I  
23 was there when the President of the United States and the  
24 Chinese Premier made their joint announcement about the  
25 climate targets. So needless to say, the Indians were

1 quite excited about this and quite concerned about what it  
2 meant for them and for next stages in the international  
3 climate process.

4 But as part of my time there, since I knew I was  
5 going to have a day maybe to do some other work in New  
6 Delhi, I met with the Ministry of Environment and the  
7 Climate in the new Modi government and had an amazing  
8 conversation about the need they have for data in order to  
9 build their air quality program.

10 While I was there, we also released a report that  
11 the Air Resources Board was a party to that we did in  
12 conjunction with Dr. Patorini's organization, the Terry  
13 Institute, with the Scripps Institute, our old friend Dr.  
14 Ramanathan. The three of us were there unveiling this  
15 report. And the number one recommendation of the report  
16 was to expand and improve the air quality monitoring  
17 network in India because it is so considered to be so  
18 unreliable and so weak in terms of its ability to be used  
19 for the source attribution, for designing programs, and so  
20 forth.

21 I found myself in a meeting with this minister  
22 who was saying, okay, I want California to help us. We  
23 want you to work with our staff. We want within 90 days a  
24 recommendation on what we should be doing. All of a  
25 sudden, I felt I had been converted into a member of the

1 Indian Air Pollution Control Agency. But in fact, we are  
2 now in a position where fortunately with help and some  
3 funding support I believe both from private foundations  
4 and from the U.S. government, we are going to be asked to  
5 be involved in a pretty interesting effort to design a new  
6 state-of-the-art cost-effective air quality monitoring  
7 system in this India. And all of that builds on the work  
8 that our staff has done in this area. So hopefully that's  
9 a good build up to a report from the head of our Research  
10 Program and all.

11 Did you have any introductions on this one, Mr.  
12 Corey?

13 DEPUTY EXECUTIVE OFFICER COREY: Well, just I  
14 think they teed it up well. I think we can go right to  
15 the staff presentation.

16 CHAIRPERSON NICHOLS: Okay. Great.

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

19 MANAGER MC CAULEY: Thank you, Mr. Corey.

20 Good morning, Chairman Nichols and members of the  
21 Board.

22 This morning, I will provide an overview of how  
23 air quality field studies provide important scientific  
24 data to support a variety of air quality and climate  
25 programs.

1                   --o0o--

2                   MANAGER MC CAULEY: For over three decades, the  
3 Air Resources Board has developed and participated in  
4 multiple air quality field studies that have helped inform  
5 the design of successful strategies that improve the air  
6 quality in California.

7                   Field studies have examined atmospheric  
8 processes, emissions, and air quality at the statewide,  
9 regional, and local levels. Regional studies have focused  
10 on ozone and particulate matter pollution. At the local  
11 level, we have looked at the benefit of our programs in  
12 individual communities highly impacted by air pollution.  
13 Most recently, we have partnered with other agencies on  
14 statewide climate-related efforts.

15                   --o0o--

16                   MANAGER MC CAULEY: Air quality field studies can  
17 be designed to meet a number of different objectives. A  
18 fundamental goal of most field studies is to improve  
19 understanding of how the chemical and physical processes  
20 that form and disburse air pollution. However, field  
21 studies can also be designed the address specific  
22 questions about the nature of air pollution problems  
23 whether at the local, regional, or statewide level.  
24 Another aspect of field studies can be to collect data for  
25 use in assessing the relative effectiveness of air



1 in California could not have been accomplished without  
2 partner agencies. The local air quality districts play  
3 key rolls in field studies in their jurisdiction. Federal  
4 agencies such as the National Oceanic and Atmospheric  
5 Administration, the National Aeronautics and Space  
6 Administration, the US Navy, and U.S. EPA share our need  
7 to understand the atmosphere, and their efforts in the  
8 state have been vital.

9 The University of California and other  
10 universities also play an important role in our air  
11 quality research program. Over the years, funding for air  
12 quality studies has been provided by a combination of  
13 sources, including federal, state, and local agencies and  
14 affected regions.

15 --o0o--

16 MANAGER MC CAULEY: California has one of the  
17 most extensive networks of ongoing air quality monitoring  
18 stations in the country. The network has documented  
19 progress towards attainment of other air quality standards  
20 and changes in atmospheric chemistry. Field studies can  
21 enhance the routine network by using instrumented air  
22 craft, tall towers with monitoring equipment, along with  
23 radar, lidar, and satellites.

24 Data collected with these tools helps to  
25 characterize the influence of air pollution high above

1 ground level and on the air quality in communities.  
2 Expanded networks of monitoring and meteorological  
3 stations provide information on spacial variability of air  
4 pollution within a region.

5           Collection of data on compounds not measured by  
6 our routine network help improve understanding of  
7 atmospheric chemistry and the nature of air pollution in  
8 California.

9           In addition, field studies help identify daily  
10 variations in emissions, which allows us to more  
11 effectively model specific pollution episodes.

12                           --o0o--

13           MANAGER MC CAULEY: As I mentioned earlier,  
14 California's field studies can be local, regional, or  
15 statewide in nature. Now let's focus on regional field  
16 studies for a moment.

17           These studies are designed to understand how the  
18 interaction between the specific mix of emissions sources,  
19 geography, and meteorological characteristics of a region  
20 contribute to air pollution problems. There are two  
21 distinct study regions in California, central California  
22 and southern California. While there are commonalities  
23 between the two, the differences are great enough to  
24 require focused studies for each. The scope of the study  
25 regions is designed to incorporate both upwind and

1 downwind relationships among California's air pollution  
2 control districts, as well as a portion of the Pacific  
3 Ocean.

4 --o0o--

5 MANAGER MC CAULEY: This map illustrates the two  
6 major study areas. The Central California study area  
7 includes the Sacramento region, the San Joaquin Valley,  
8 and the San Francisco Bay Area. It also includes the  
9 adjacent mountain counties. The Southern California study  
10 area includes the South Coast, San Diego, and downwind  
11 desert areas.

12 --o0o--

13 MANAGER MC CAULEY: One of the major priorities  
14 of California's field studies has been to collect new  
15 scientific data needed to develop State Implementation  
16 Plans for ozone and particulate matter air quality  
17 standards. As emissions in California are reduced over  
18 time, we see lower ozone and PM levels at monitoring  
19 stations, as well as changes in the atmospheric chemistry.  
20 This is one reason why it's been important to do  
21 successive studies over several decades. The findings  
22 from earlier studies provide a foundation to build upon  
23 and better understand and reflect the benefits of our  
24 programs as they are implemented. Findings from multiple  
25 studies over the years have improved California's air

1 quality modeling and supported SIP strategy development.

2 --o0o--

3 MANAGER MC CAULEY: Now let's take a look at  
4 field study findings which have helped ARB address our two  
5 biggest air pollution problems: Ozone and particulate  
6 matter.

7 First, let's look at key ozone findings.

8 --o0o--

9 MANAGER MC CAULEY: The atmospheric chemistry  
10 which forms ozone is complex, and our understanding of  
11 these processes has greatly improved. The foundation of  
12 current and upcoming State Implementation Plans is a body  
13 of science that gives us a solid understanding of the roll  
14 of VOC and NOx in ozone formation and the relative  
15 effectiveness of reducing each. Early field studies in  
16 California led ARB to recognize that reductions in both  
17 VOCs and NOx were needed.

18 Subsequent field studies occurring about a decade  
19 apart documented changes in atmospheric composition due to  
20 California's air pollution control efforts. The field  
21 studies identified some areas of the state where NOx  
22 control is especially important relative to VOCs. Current  
23 air quality modeling indicates that large NOx reductions  
24 will be essential to meet ozone standards in the coming  
25 decades, although some ongoing VOC reductions will also be

1 needed.

2           In addition to exploring the relative role of NOx  
3 and VOC in ozone formation, the specialized measurements  
4 collected as part of California's field studies have also  
5 looked at how nighttime atmospheric chemistry impacts  
6 daytime ozone levels, as well as how pollutants aloft  
7 influence ozone levels on the ground. This information  
8 has been incorporated into the air quality modeling done  
9 for California's SIPs.

10           The next two slides discuss some additional  
11 finding for San Joaquin Valley and the South Coast air  
12 basins.

13   --o0o--

14           MANAGER MC CAULEY: In the San Joaquin Valley,  
15 while the predominant air flow during the ozone seasons  
16 moves north to south, we've also learned there are complex  
17 wind patterns creating a mechanism for circulating  
18 pollutants throughout the valley. As a result, high ozone  
19 concentrations can occur in many locations throughout the  
20 Central Valley.

21           Another important finding resulted from the study  
22 of biogenic emissions in the region. ARB has funded  
23 several studies to look at the VOCs emitted by different  
24 types of vegetation and the magnitude of these biogenic  
25 VOCs in the San Joaquin Valley. These studies found that

1 the presence large biogenic emissions tempers the impact  
2 of VOC controls from anthropogenic low sources. Field  
3 studies have also provided enhanced data for air quality  
4 modeling that has shown that ozone reductions in the San  
5 Joaquin Valley reduce ozone in downwind mountain areas,  
6 including national parks.

7 --o0o--

8 MANAGER MC CAULEY: Regional field studies in the  
9 South Coast air basin have provided insights into the  
10 atmospheric chemistry and physical processes that impact  
11 ozone pollution levels.

12 One key finding is that a lot of recirculation of  
13 pollution in the air basin contributed to episode buildup.

14 Another finding is that VOC reductions are  
15 relatively more effective in the South Coast compared to  
16 the San Joaquin Valley due to lower biogenic emissions.

17 With respect to air pollution transport, data and  
18 air quality modeling show that ozone reductions in the  
19 South Coast reduce ozone levels downwind in San Diego,  
20 Ventura, and desert areas.

21 --o0o--

22 MANAGER MC CAULEY: Now let's look at how field  
23 studies influenced our particulate matter programs. In  
24 this presentation, I will concentrate on PM2.5, or fine  
25 particulate matter.

--o0o--

1  
2           MANAGER MC CAULEY: In both central and southern  
3 California, the PM 2.5 problem is the result of both  
4 directly emitted PM 2.5 and the secondary formation of PM  
5 2.5 in the atmosphere. Secondary PM 2.5 is primarily in  
6 the form of ammonium nitrate. The buildup of ammonium  
7 nitrate on stagnant days make it the biggest contributor  
8 to regional PM 2.5.

9           Given the magnitude of the ammonium nitrate on  
10 days that violate air quality standards, controlling NOx  
11 is the most effective approach for reducing PM 2.5 on a  
12 regional basis. However, reductions in directly emitted  
13 PM 2.5 are also necessary to attain air quality standards.

--o0o--

14  
15           MANAGER MC CAULEY: Increased density and  
16 frequency of air quality measurements during field studies  
17 in Central California were designed to capture the  
18 multi-day episodes, which in the San Joaquin Valley allow  
19 PM 2.5 buildup in the both urban and rural areas. In some  
20 cases, the valley can experience multi-week episodes.

21           The emissions contributing to the valley's PM 2.5  
22 problem include sources of NOx and directly emitted PM  
23 2.5. Field studies identified that residential wood smoke  
24 and commercial cooking activities add to regional PM 2.5  
25 in urban areas and further controls on these sources are

1 included in the Valley Air District's Air Quality Plan.  
2 Residential wood burning controls have also been an  
3 important element of PM 2.5 strategies in both the Bay  
4 Area and Sacramento based on the contribution to  
5 exceedances of air quality standards.

6 --o0o--

7 MANAGER MC CAULEY: Southern California's PM 2.5  
8 problem differs from the Central Valley's in a number of  
9 ways. For example, high PM 2.5 days are not limited to  
10 cold weather periods.

11 Another difference between the two regions is  
12 that in the past ammonium sulfate was more prevalent in  
13 coastal areas than in other areas of the state. Controls  
14 which targeted sulfur associated with shipping were  
15 instituted and our routine monitoring sites have  
16 documented a dramatic reduction in PM 2.5 sulfate.

17 Measurements during CALNEXT aboard a research  
18 vessel confirmed much reduced sulfur in a ship's exhaust  
19 plume.

20 Local field studies have also shown that truck  
21 rules targeting diesel particulate matter pollution have  
22 also resulted in a significant reduction in PM 2.5 levels  
23 near the ports.

24 --o0o--

25 MANAGER MC CAULEY: This presentation has

1 highlighted the general findings of past air quality field  
2 studies. These studies have enhanced air quality  
3 modeling, provided supplemental monitoring data, and  
4 pollutant speciation, and helped improve emission  
5 inventories.

6 The 2015-2016 SIP development process will build  
7 on this foundational work. The upcoming SIP process will  
8 also include substantial new technical work, including  
9 assessment of current air quality data and trends, new air  
10 quality modeling, and updates to the emission inventory  
11 and future forecasts.

12 The combination of these analyses will provide a  
13 scientific weight of evidence evaluation as part of the  
14 attainment demonstration for the air quality standards.

15 Today's presentation is a prelude to further  
16 public discussion of the data and analyses that will be  
17 prepared to support development of the upcoming SIPs for  
18 both ozone and PM 2.5. As ARB staff works with air  
19 districts on these SIPs, the scientific and technical  
20 information to be used will be discussed in future public  
21 workshops and other public meetings.

22 --o0o--

23 MANAGER MC CAULEY: Now let's turn to climate  
24 studies.

25 --o0o--

1           MANAGER MC CAULEY: CALNEXT 2010 was the first  
2 major field study in California to address both air  
3 quality and climate questions. Dozens of research groups  
4 participated, taking advantage of monitoring super sites  
5 in Bakersfield and Pasadena and research vessel in  
6 multiple aircraft.

7           So far, over 100 peer reviewed publications have  
8 come out of CALNEXT. The data collected will improve our  
9 inventories of air pollutants, precursors, and greenhouses  
10 gases and equally important advance our understanding of  
11 the chemistry which forms pollution. The multiple  
12 aircraft provided a dense database of ozone levels above  
13 the surface.

14                               --o0o--

15           MANAGER MC CAULEY: While ARB has long recognized  
16 the adverse health effects of black carbon, black carbon  
17 also has a significant impact on climate and is considered  
18 a short-lived climate pollutant.

19           A study conducted by Scripps showed that four  
20 decades of particulate matter controls have reduced black  
21 carbon levels by 90 percent in California. Thus, efforts  
22 to improve air quality have also had benefits in combating  
23 climate warming.

24           Current research is investigating brown carbon,  
25 which primarily comes from biomass burning and has

1 recently been recognized as a short-lived climate  
2 pollutant.

3 --o0o--

4 MANAGER MC CAULEY: One important aspect of the  
5 field study is to assess the benefits of our air quality  
6 programs. Targeted studies are tracking the benefits of  
7 our diesel rules on reducing localized exposure.  
8 Currently, we are funding studies which examine emissions  
9 from diesel trucks and use the mobile platform to monitor  
10 to confirm that port regulations are benefiting  
11 communities near the ports.

12 In the past few years, a partnership with NASA  
13 has provided satellite data to help validate our  
14 inventories for NOx and methane. We are also  
15 collaborating on studies to look at the contribution of  
16 Asian transport to ozone levels in California.

17 --o0o--

18 MANAGER MC CAULEY: In summary, the success of  
19 our programs rests on a strong scientific foundation.  
20 Field studies provide essential scientific data for  
21 development of SIPs, climate policies, and local community  
22 strategies. And as in the past, partnerships and  
23 collaborations will continue to be crucial to future air  
24 quality and climate field studies. Thank you.

25 CHAIRPERSON NICHOLS: Thank you.

1           Questions or comments? Dr. Balmes.

2           BOARD MEMBER BALMES: I just want to thank the  
3 staff for all the work they've been doing for many years  
4 in this regard.

5           As a user of some of the data generated by field  
6 studies that the Research Division has played a major role  
7 in, air pollution research wouldn't be the same without  
8 the efforts of CARB staff over the years. So I greatly  
9 appreciate all that you've done for many years, and I  
10 appreciate this report.

11           I hope my fellow Board members appreciate the  
12 amount of effort that's required and the value of the data  
13 that's been generated and will continue to be generated by  
14 this kind of work.

15           CHAIRPERSON NICHOLS: Thank you.

16           Any other -- yes, Ms. Berg.

17           BOARD MEMBER BERG: I, too, want to echo Dr.  
18 Balmes's sentiment. I had a lively discussion with staff,  
19 mainly because I felt that the report did not do the  
20 department justice. We all know that we need to keep  
21 working on lowering VOCs and NOx and the work that is  
22 behind those statements is tremendous. And I wanted to  
23 make sure that we saw some of those efforts. So my Board  
24 briefing really was focused on that side of it.

25           I think one question I will have for you is

1 looking at the field studies, are you seeing any  
2 indication of any new trends within the atmospheric  
3 science that is going to lead us into how to think about  
4 the SIPs differently?

5 ASSISTANT DIVISION CHIEF MAGLIANO: This is Karen  
6 Magliano, Assistant Chief of the Air Quality Planning and  
7 Science Division.

8 I think what we have really seen through that  
9 incremental process that we've had through the field  
10 studies has improved our understanding as we've been  
11 implementing our control programs how has that evolution  
12 of VOC and NOx programs really changed as we've been  
13 implementing our programs. We have seen for years that  
14 we've really needed a multi-pollutant strategy for both  
15 VOCs and NOx to help us improve air quality.

16 But over the long term, I think we're finding  
17 that more and more we're going to need those very  
18 substantial NOx reductions to help us achieve the ozone  
19 standards throughout the state. And those field studies  
20 have really helped us understand both the spacial extent  
21 over which we need those reductions and the magnitude of  
22 those reductions. But they've also helped us understand  
23 better just where we potentially need to especially  
24 benefit from the VOC controls. And as we move forward in  
25 our upcoming SIP development process, I think we'll have a

1 much better understanding about how we can better look at  
2 the need for statewide programs versus regionally focused  
3 programs. And that will be extremely beneficial.

4 BOARD MEMBER BERG: Thank you very much.

5 CHAIRPERSON NICHOLS: Yes, Mrs. Riordan.

6 BOARD MEMBER RIORDAN: I want to thank the staff  
7 also because the work that you're doing at the very most  
8 local level -- as you know, I had the opportunity to  
9 travel along the 710 freeway and really understand the  
10 incredible work that you're doing at such a finite level  
11 and what that means to us in the future as we develop our  
12 plans to somewhat mitigate the effects of air pollution.

13 CHAIRPERSON NICHOLS: You weren't just traveling.  
14 You were monitoring.

15 BOARD MEMBER RIORDAN: I was monitoring, holding  
16 that equipment in my lap.

17 CHAIRPERSON NICHOLS: The picture is very  
18 dramatic.

19 BOARD MEMBER RIORDAN: On the other side, on a  
20 much bigger side, it's so important what you're doing  
21 because it makes a difference between the air basins. And  
22 I represent on a local Board a receptor basin where much  
23 of the pollution travels through the passes and other  
24 modes from the South Coast and it really makes us  
25 understand why we have to work with our neighbors to work

1 together, Ms. Mitchell, to work together to help and as we  
2 do with the San Joaquin and periodically the Mohave has  
3 had a little extra money to be able to share in the Carl  
4 Moyer Program with those two districts because it's a  
5 great help to us if we allow for the cleanup of air  
6 pollution in the districts next to us who are affecting  
7 our air quality.

8           So it's terrific to have the bigger scope of  
9 measurements, the atmospheric. So you go from a freeway  
10 up into the atmosphere, but we're doing it all. And I  
11 really commend the staff for their innovation and what  
12 we've been able to do. And we ought to be able to share  
13 with India and their interests all of this, because I  
14 think once we can share that information, they should be  
15 able to easily replicate it.

16           CHAIRPERSON NICHOLS: Oh, yes. We're dealing  
17 with very sophisticated educated people. It's not like we  
18 have to sort of teach them the basics. It's more a  
19 question of sort of helping to think through based on what  
20 we've learned from these experiences ways too shortcut it  
21 and do it more cost effectively maybe than some of the  
22 things -- they don't have 40 years to build out a program  
23 or many millions of dollars.

24           BOARD MEMBER RIORDAN: So we should send one of  
25 our clever cars over there.

1           CHAIRPERSON NICHOLS: That would be good. Yes.  
2           Dr. Balmes.

3           BOARD MEMBER BALMES: In my enthusiasm for  
4 praising the staff, I forgot to ask my question, which is  
5 with regard to ultra fine particles. I asked this in my  
6 briefing. But for the Board as a whole, what are we doing  
7 with regard to ultra fines since that's an area of  
8 important toxicological and epidemiologic concern. And I  
9 think down the road we may have to be dealing with  
10 regulating ultra fines.

11           RESEARCH DIVISION CHIEF CROES: Ultra fine  
12 particles are a subset of PM 2.5 because they can  
13 penetrate deeper in into the lung and cross over into the  
14 blood strains. There's these various hypotheses they have  
15 differential health effects from the larger particles that  
16 compose PM 2.5. So we've been setting this for the past  
17 five years. Basically, a lot of our emissions testing  
18 program is looking at the effect of different  
19 technologies. And I think the good news is that things  
20 like the diesel particulate filters reduce ultra fine  
21 particles by a couple orders of magnitude.

22           We're also looking at other potential sources of  
23 ultra fines, as well as near-roadway exposures. But most  
24 importantly, we're including it in our health studies. So  
25 for instance, the Board approved last year a major

1 epidemiological study to look at the effect of ultra fine  
2 separate from PM 2.5 across the state. This is the first  
3 major study of its kind. We hope to have results in two  
4 and a half or three years.

5 CHAIRPERSON NICHOLS: Yes, Dr. Sherriffs.

6 BOARD MEMBER SHERRIFFS: I don't think I have a  
7 question here, but just a reminder. And the Board  
8 understands how important supporting the science is to  
9 getting our work done. And just thinking of a recent  
10 example in the Central Valley, which with my inferiority  
11 complex of the Central Valley, I hesitate to bring up  
12 fireplaces when we have things like international, global  
13 trade and the ports and these giant ships and that kind of  
14 thing. But, you know, it's the science that shows us how  
15 important it is to have a rule in the Central Valley that  
16 has put an emission standard at 20 micrograms, which  
17 before earlier this year it was 30.

18 And we're talking about three to five tons of  
19 primary PM 2.5 being reduced through this. And it's the  
20 science that drives adopting very difficult regulations  
21 like that. And then also the science that supports,  
22 because one of the Board members suggested perhaps we  
23 should have an exception during the holidays so we can  
24 have a day off on Thanksgiving and Christmas. And the  
25 response of the Board, people recognize this might

1 administratively have some difficulties. But, in fact, it  
2 was the science and the health that drove not just the  
3 consensus but the overwhelming, no, we can't do that. We  
4 can't go backwards like that. And again, that wouldn't  
5 happen if we didn't have the science to back up the  
6 administrative things that we're doing, the regulation.  
7 So thank you.

8 CHAIRPERSON NICHOLS: I agree. I just would  
9 underscore the point that there is a direct connection  
10 between what you have been wrestling with at the local  
11 Board level in terms of the impacts of fireplaces and  
12 stoves and the work that I was referring to on the  
13 international level, which is that California's ability  
14 and our credibility to even talk about these issues is  
15 totally based on the fact that we have been so successful  
16 in bringing down harmful levels of air pollution that hurt  
17 people's health and doing it in a way that has not hurt  
18 our economy. That is what other countries are looking to  
19 emulate. So that's what we have to continue to be able to  
20 refer to if we're going to keep on doing this work.

21 Okay. I think that's it. Thank you very much.  
22 Appreciate the conversation and the update. And I think  
23 you've heard from all of us a resounding support for  
24 continuing this work. I know it's sometimes challenging  
25 when the big money always goes to implementation, but we

1 try to put together enough to keep the science programs  
2 not only alive but robust. These guys do a very good job  
3 of producing science.

4 Last, but not least, we return to the truck and  
5 bus regulation, which is back before us because it needs  
6 final adoption.

7 Mr. Corey, will you introduce this item?

8 DEPUTY EXECUTIVE OFFICER COREY: Yes, Chairman.

9 At the Board hearing in April this year, the  
10 Board approved adoption of proposed amendments to the  
11 truck and bus regulation. The amendments were designed to  
12 provide lower cost compliance options and greater  
13 compliance flexibility to truck owners to better ensure  
14 the emission benefits of the regulation to be realized.

15 Based on Board direction at the April hearing,  
16 staff developed modified regulatory language which was  
17 made available for public comment. Following the  
18 completion of that public process, staff prepared the  
19 final regulation order for the amendments, which is being  
20 presented to the Board today for final adoption.

21 Staff also prepared written responses to  
22 additional comments which raised environmental issues and  
23 were received during a subsequent 15-day comment period.  
24 Staff proposes the Board approve these responses as part  
25 of today's Resolution.

1 I'd now like to introduce Beth White of the  
2 Mobile Source Control Division will now give the staff  
3 presentation. Beth.

4 (Thereupon an overhead presentation was  
5 presented as follows.)

6 MANAGER WHITE: Thank you.

7 Good morning, Chairman Nichols and members of the  
8 Board.

9 Today, I will be presenting the final regulation  
10 order for the amendments to the truck and bus regulation.  
11 The amendments you approved in April provide fleet owners  
12 more flexibility to comply with the regulation, while  
13 better preserving emission benefits the regulation was  
14 designed to achieve.

15 This item is being presented for final action  
16 since there were several changes requested at the April  
17 hearing that required modified regulatory language. Those  
18 changes are now reflected in the final regulation order  
19 before you.

20 --o0o--

21 MANAGER WHITE: As you recall the Board hearing  
22 in April of this year, the Board approved for adoption  
23 staff's proposed amendments to the regulation as set forth  
24 in Appendix A to the Initial Statement of Reasons released  
25 to the public on March 5, 2014.

1           The Board directed the Executive Officer to make  
2 modified regulatory language that reflected the changes  
3 directed by the Board and any other conforming  
4 modification available for public comment for a period of  
5 at least 15 days. The Executive Officer was directed to  
6 take final action to adopt the finalized regulation after  
7 addressing all appropriate modifications or to present the  
8 final regulation order to the Board for final  
9 consideration.

10           The Executive Officer concluded that presenting  
11 the final regulation to the Board for final adoption was  
12 the most appropriate action, given the changes requested  
13 by the Board at the hearing and the importance of this  
14 program.

15           Modified regulatory language and supporting  
16 documentation were circulated to two 15-day public comment  
17 periods: From July 1, 2014, to July 17, 2014, and  
18 September 12, 2014, to September 29, 2014.

19           Now staff has completed the final regulation  
20 order, which reflects all changes directed by the Board at  
21 the April 2014 hearing and other conforming modifications.

22                           --o0o--

23           MANAGER WHITE: I will briefly summarize the  
24 modifications made available for the two 15-day comment  
25 periods. The modifications were described in detail in

1 each of the notices issued for those modifications.

2 They include: A change to the compliance date  
3 for the second truck in a small fleet from January 1,  
4 2016, to January 1, 2017, to reflect the Board decision to  
5 change the compliance date.

6 A change to allow certain cattle livestock trucks  
7 to qualify for the specialty agricultural vehicle  
8 extension and allow others to operate under the extension  
9 for two cattle seasons each year as directed by the Board  
10 at the hearing.

11 Modifications to the staff proposal of the newly  
12 added economic hardship extension per the Board's  
13 direction at the April 2014 hearing. This includes  
14 changing the proposed extension deadline from January 1,  
15 2018, to January 1, 2017, and requiring that the vehicle  
16 meet the model year schedule upgrade requirements by 2017  
17 instead of requiring the proposed upgrade to a 2010 model  
18 year equivalent engine.

19 In addition, the Board directed staff to make  
20 changes to reduce the potential for fraud and abuse.

21 Lastly, there were other minor modifications that  
22 consist primarily of definition and provision  
23 clarifications and other minor changes to provide  
24 consistency and improve readability.

25 --o0o--

1           MANAGER WHITE: The environmental analysis  
2 included in the staff report released on March 5, 2014,  
3 concluded that implementation of the amendments would not  
4 result in any adverse environmental impacts. The  
5 modifications made available for 15-day comment do not  
6 alter that conclusion so no revisions to the environmental  
7 analysis or recirculation was required.

8           As described in the air quality section of the  
9 staff report, emissions of diesel PM, NOx, and other  
10 criteria pollutants will continue to decline from today's  
11 levels as a result of the amended truck and bus  
12 regulation.

13           The 15-day modifications do not alter this  
14 conclusion. Using the base line of existing environmental  
15 conditions, the regulation, as amended, will lead to  
16 continued reductions in pollutants and will continue to  
17 improve air quality.

18           As described in the staff report, the amendments  
19 are projected to result in a near-term delay in achieving  
20 some air quality benefits initially projected for the  
21 regulation in 2010. That 2010 projection was based on the  
22 assumption of full compliance, which is no longer an  
23 accurate projection of what is actually occurring.

24           Of all the modifications made available for  
25 15-day comment, only the extended compliance date for the

1 second truck of the small fleet option for 2016 to 2017  
2 could alter the quantified emission benefits included in  
3 the staff report. As explained at the April 2014 hearing,  
4 staff's conservative estimate is a change of .4 tons per  
5 day of PM and five tons per day of NOx in the year 2016  
6 only. This is a conservative estimate because staff  
7 expects this modification to be partially offset by newly  
8 created incentive funding opportunities.

9           Despite the small change in 2016, the regulation  
10 as amended is projected to still achieve the same NOx  
11 benefits in 2018 and the same PM benefits in 2020. The  
12 regulation as amended will continue to achieve State  
13 Implementation Plan commitments necessary to meet federal  
14 air quality standards and reduce exposure to diesel PM to  
15 meet the state's goals established in the Diesel Risk  
16 Reduction Plan.

17                           --o0o--

18           MANAGER WHITE: During the initial 45-day comment  
19 period, ARB received three comment letters that raised  
20 environmental issues related to the proposed amendments.  
21 Written responses to those environmental issues were  
22 approved by the Board in April of this year.

23           Although ARB did not reopen the comment period on  
24 the environmental analysis when the modified regulatory  
25 language was circulated for the subsequent 15-day comment

1 period, one comment letter submitted in July raised  
2 additional environmental issues. The primary issue raised  
3 was that staff needed to conduct additional environmental  
4 analyses for the modifications. Staff prepared written  
5 responses to the new issues raised in the July 2014  
6 comment letter. Those written responses, along with  
7 revised written responses to the comments submitted during  
8 the 45-day period, are being presented to the Board for  
9 approval as part of the Resolution before you to comply  
10 with the requirements of ARB regulations implementing the  
11 California Environmental Quality Act.

12 --o0o--

13 MANAGER WHITE: In closing, we recommend that the  
14 Board approve Resolution 14-41, which reaffirms the  
15 finding that the amendments do not result in any adverse  
16 environmental impacts, approves the written responses to  
17 environmental comments set forth in Attachment B to the  
18 Resolution and adopts the final regulation order set forth  
19 in Attachment A to the Resolution.

20 CHAIRPERSON NICHOLS: Thank you.

21 We had no witnesses who signed up to speak on  
22 this item, so I can close the record at this point and  
23 move to any Board discussion.

24 If we do receive any written or oral comments,  
25 they will not be accepted at this point. This is it.

1 This is the final action on this particular rule. It has  
2 gone for a long time. But this bifurcated process seems  
3 to be the best and clearest way to comply with our  
4 obligations under CEQA.

5 The findings in response to the environmental and  
6 the comments on the environmental analysis and the  
7 response on the comments are all part of this single  
8 Resolution. I think that's considered to be acceptable.  
9 And I think that the responses are very thorough.

10 Are there any questions that any of the Board  
11 members have at this point?

12 Comment? Yes, John.

13 BOARD MEMBER BALMES: I was going to move we  
14 accept the staff recommendation.

15 CHAIRPERSON NICHOLS: I accept that motion. Is  
16 there a second?

17 BOARD MEMBER RIORDAN: Second.

18 BOARD MEMBER BERG: Second.

19 CHAIRPERSON NICHOLS: I think Mr. De La Torre  
20 wanted to comment before we take a vote.

21 BOARD MEMBER DE LA TORRE: Thank you. If you'll  
22 recall, I voted no on this item first time around. I'm  
23 going to be voting yes today, not because I changed my  
24 mind, but because I believe that what we are doing here  
25 today does meet the requirements under CEQA, that staff

1 has done all the proper due diligence regarding the law.  
2 And so, therefore, I'm going to be supporting this for the  
3 procedural effort that was made, not for the original  
4 issue, which I still remain opposed.

5 CHAIRPERSON NICHOLS: Thank you.

6 In that case, I think we can do our usual voice  
7 vote. So I'll ask all in favor please to signify by  
8 saying aye.

9 (Unanimous aye vote.)

10 CHAIRPERSON NICHOLS: Opposed?

11 Any abstentions?

12 Very good. I'm very glad to have this done. I'm  
13 sure the staff is even more glad to know this is now a  
14 rulemaking.

15 We have a couple other things we have to do  
16 before we adjourn. The first one is to take public  
17 comment. So we had one person sign up for the public  
18 comment period. And that's our old friend Randall  
19 Friedman who is here to talk about electric vehicle  
20 charging.

21 MR. FRIEDMAN: Good morning, Chairman Nichols,  
22 Board members.

23 I'm here today as an individual. It's been a  
24 year since I spoke with you about public charging loads  
25 for EVs. I wish I could say things are getting better,

1 but frankly, I think they're getting worse. This in  
2 contrast to the glowing reports we get about exploding EV  
3 sales with a high visibility of marking the sale of the  
4 100,000th plug-in vehicle car recently in California.

5           Everybody loves a story about great sales  
6 performance. But what happens after the happy owner  
7 leaves the lot and wants to use the car? While there are  
8 more public chargers, the biggest issues involve whether  
9 they work and the owner can count on its availability.  
10 For example, the L3 charger at U.C. Davis in the city of  
11 Vacaville have been out for months. Both of these  
12 chargers were given to the entities. It seems that once  
13 the initial enthusiasm of getting it wore off, there is  
14 little interest in the reality of maintenance.

15           How challenging is this landscape? I'm sad to  
16 say in the last month on the SF Bay Area Leaf Owners  
17 Facebook group, there have been several people regretfully  
18 saying they have to give up their EV. They are Bay Area  
19 commuters who need to charge and can no longer count on  
20 finding a charger available. These are energetic early  
21 chargers who are quite sad about this but they simply  
22 can't make it work.

23           Further, in the spirit of discussions about this  
24 subject, the issue of chargers for multi-family homes  
25 keeps coming up. Are EVs going to be relegated only to

1 owners of single-family homes which hardly seem the  
2 blueprint for smart growth development.

3 California still is still woefully behind in  
4 public charging. While there is money to place chargers,  
5 there doesn't appear to be the follow-up to their  
6 maintenance. Moreover, we still lack a systemic approach  
7 to a comprehensive charging network to ensure the mobility  
8 we expect when we purchase a car. Once again, just look  
9 at metro, Seattle or Portland and major highway corridors  
10 in Washington and Oregon, for example.

11 Governor Brown wants one and a half million EVs  
12 in California by 2025. Numbers like this are a base line  
13 necessity if we are going to meet increasingly difficult  
14 to obtain climate change goals. Frankly, we will never  
15 get there until we figure out public charging.

16 I continue to fear and dark sliding and dark  
17 clouds ahead when many of these 100,000 plug-in owners try  
18 to plug in and stories circulate on social networks about  
19 theirs EVs turn back in. It's already starting to happen.  
20 Just check the social networks for yours.

21 I would like to think there are creative  
22 solutions out there. Maybe we could recognize that  
23 greenhouse gas reductions of public chargers, especially  
24 solar-powered chargers like Vacaville and U.C. Davis and  
25 use some cap and trade money to ensure this infant network

1 survives and somehow create incentives for institutions  
2 like U.C. Davis and Vacaville that have their chargers  
3 operational to the growing numbers of EV owners. For both  
4 air and water quality considerations, electrified  
5 transportation must be our future, but we have first have  
6 to solve this problem of plug-ins first.

7 CHAIRPERSON NICHOLS: Thank you. I appreciate  
8 the comment. And there's much in it that I agree with,  
9 actually.

10 I would really appreciate it if you have a  
11 written version of it, if you would submit it to staff  
12 because I think we should work on a response to it. We  
13 don't always respond to comments, but this is one of those  
14 situations where I feel like some sort of a formal reply  
15 would be possibly useful. So if you agree with that,  
16 would you --

17 MR. FRIEDMAN: I would be happy to share some of  
18 the discussions on the social media. There's been quite  
19 some spirited discussions. I don't know if that's  
20 something that staff routinely follows, but there is a lot  
21 of information -- there is a lot of very dedicated people  
22 out there trying to make their EVs work. And yet, it's  
23 really sad when someone throws in the towel. And these  
24 are the people who should be --

25 CHAIRPERSON NICHOLS: I think these anecdotes,

1 collecting them is very useful. And again, I'd like to  
2 take advantage of the work you've already done. That will  
3 help us, too.

4 MR. FRIEDMAN: Certainly. Thank you.

5 CHAIRPERSON NICHOLS: Thank you. Okay. We now  
6 have a pleasant but sad occasion. Not sad really. It's  
7 mostly happy. But it's always sad when we recognize that  
8 someone who has meant a great deal to us is moving on,  
9 even if we know that they're doing it for very good  
10 reasons and are looking forward to the next interesting  
11 phase, still, we get to say good buy.

12 So we do have a Resolution that marks the  
13 retirement of the last of the old cars of our senior  
14 Deputies at ARB, our friend, Lynn Terry, who probably I  
15 would say overall has managed to avoid having major  
16 controversial items in front of the Board. I don't know  
17 how much this was part of a deliberate strategy and how  
18 much it reflects on the fact that she has a unique gift  
19 for resolving problems. Her ability to defuse difficult  
20 situations is indeed legendary, but so also has been her  
21 leadership in implementing some of the most complicated  
22 and difficult programs that ARB has.

23 While, you know, we brag about and deservedly so  
24 our science and technical chops and all of the great  
25 regulations that we've adopted, the meat and potatoes, if

1 you will, of getting the air cleaned up comes through the  
2 Clean Air Act, SIPs, and rules that she has very ably  
3 ushered through the process, from local government to EPA  
4 approval over a period of years, which we're going to  
5 embarrass her by remembering.

6 We do have an official Board Resolution, and  
7 we're also going to adjourn the meeting once we've  
8 presented it to her and hopefully embarrassed her a little  
9 bit more we'll adjourn and enjoy a little social time as  
10 well.

11 But before we do that, I think I have to actually  
12 present this Resolution. I guess I can read it from here  
13 and then we can all take a picture. This is fairly long.  
14 And it's signed by all of us.

15 "Whereas, Lynn began her career at ARB in 1985 as  
16 an Air Resources Technician II in what was then the  
17 Stationary Source Division and quickly moved up the ranks  
18 to become, in 1995, an Assistant Executive Officer and  
19 then Deputy Executive Officer where she demonstrated her  
20 leadership skills and has been a role model for women at  
21 ARB ever since.

22 "Whereas, Lynn has been at the forefront of  
23 California's clean air planning since 1992, overseeing the  
24 drafting of the first plans under the California Clean Air  
25 Act, before turning her attention to implementation of the

1 Federal Clean Air Act.

2 "Whereas, Lynn was there in 1994 when ARB  
3 approved its first State Implementation Plan under the  
4 Clean Air Act amendments of 1990, a plan she was  
5 instrumental in developing in record time. Not only did  
6 she help write the plan, she helped seal the 17 boxes of  
7 documents and load them in a car so they could be  
8 delivered to the Environmental Protection Agency by the  
9 statutory deadline.

10 "Whereas, since 1995, Lynn has been responsible  
11 for the Board's approval of 181 SIPs, some large, some  
12 small, none easy.

13 "Whereas, ARB has Benefited greatly from Lynn's  
14 background as a scientist, her shepherding of ARB's  
15 research program and her ability to build policy from  
16 science as the basis of ARB's world-renowned programs.

17 "Whereas, her leadership was crucial to the  
18 success of the Central California Ozone Study and the  
19 California Regional Particulate Air Quality Study, two of  
20 the largest air quality studies ever conducted that have  
21 supported the robust science-based air quality programs in  
22 the San Joaquin Valley.

23 Whereas, Lynn's keen intellect, cool head,  
24 strategic thinking, scientific perspective, and political  
25 skills have been a constant and comforting asset to the

1 Board and staff, providing a common sense and  
2 forward-thinking voice to the Board's deliberation.

3 "Whereas, just as Lynn's hard work is about to  
4 bring a region into compliance with federal air quality  
5 standards, the Environmental Protection Agency sets a new  
6 even more stringent and sisyphian standard so that her job  
7 is never done.

8 "Whereas, even as the goalposts have moved  
9 because of Lynn's hard work, all Californians enjoy  
10 cleaner, more healthful air.

11 "Whereas, Lynn is retiring from ARB in order to  
12 enjoy time with her husband and two daughters, Leslie and  
13 Kimberly, traveling the world, dancing, and enjoying her  
14 hobbies.

15 "Whereas, Lynn is known for her wonderful  
16 infectious, if often loud, laugh, fine taste in shoes,  
17 skilled in picking the best restaurants, so that sadly ARB  
18 will be quieter, less fashionable, certainly suffer from a  
19 lower culinary standard.

20 "Now, therefore, be it resolved, that the Board  
21 expresses its deep appreciation to Lynn Terry for her many  
22 years of dedicated service and wishes her a long and happy  
23 retirement, cruising the oceans, enjoying the wines and  
24 foods of California and the world, playing golf, and  
25 otherwise enjoying her leisure.

1           "Executed at Sacramento, California, this 20th  
2 day of November 2014."

3           And here it is from all of us. I wish it were  
4 gold, but you have a gold seal on it. I'm sure you got a  
5 place on your wall that just needs this. So Lynn, on  
6 behalf of all of us, thank you very much.

7           (Applause)

8           CHAIRPERSON NICHOLS: Supervisor Serna  
9 unfortunately has been reminded me that we never actually  
10 voted on this. It could be that if we don't vote on it,  
11 the retirement is ineffective. So may I have --

12           BOARD MEMBER SERNA: So moved.

13           BOARD MEMBER BALMES: Second.

14           CHAIRPERSON NICHOLS: A motion. Second. All in  
15 favor?

16           (Unanimous aye vote.)

17           CHAIRPERSON NICHOLS: Thank you, Lynn.

18           We anybody here to take pictures other than --  
19 despite having been reminded by at least five people, I  
20 managed to forget to say that we're not done because,  
21 Lynn, more people wish to speak about you. So we are  
22 delighted to prolong your period of embarrassment here and  
23 I think we should start with CAPCOA.

24           MR. ABBS: Good morning, Chairman Nichols and  
25 members of the Board. Alan Abbs, the Air Pollution

1 Control Officer for Tehama County and also the CAPCOA  
2 President.

3           This is my first official appearance before the  
4 Board as the CAPCOA President. It's a bittersweet moment  
5 because, despite sometimes air districts asserting that we  
6 can do this all by ourselves, the fact is that we couldn't  
7 do it without -- we couldn't do what we do without the  
8 help of the Air Resources Board, and especially the work  
9 that Lynn Terry has done with the air districts over the  
10 years.

11           So CAPCOA thought it was appropriate to provide  
12 her with a Resolution as well on her retirement. And I  
13 would like to read it.

14           "Whereas, Lynn Terry has worked at the California  
15 Air Resources Board since 1985 where she had, among other  
16 duties, responsibilities to develop plans for implementing  
17 the California Clean Air Act and the Federal Clean Air Act  
18 and;

19           "Whereas, Lynn Terry has served as the Deputy  
20 Executive Officer for the California Air Resources Board  
21 since 1997 and has been instrumental in gaining approval  
22 of several local and State Implementation Plans, and;

23           "Whereas, Lynn Terry has worked closely with air  
24 districts on environmental justice issues, sustainable  
25 communities, and transportation planning programs, and;

1           "Whereas, Lynn Terry provided valuable assistance  
2 to local air districts in interfacing with EPA on  
3 potential designations for non-attainment, including  
4 directing ARB staff to provide timely and thorough  
5 analyses and worked with local air districts on  
6 international cross-border air quality efforts with  
7 Mexico, and;

8           "Whereas, Lynn Terry managed programs at ARB on  
9 federal transportation conformity analyses, air pollution  
10 transport assessment, and mitigation requirements, federal  
11 regional Hays plans, development and quantification  
12 protocols for reducing greenhouse gas emissions, air  
13 quality requirements for planned burns to reduce wildfire  
14 risk, emissions inventory development for ARB regulations,  
15 and communities air quality assessments.

16           "Now, therefore be it resolved, that the  
17 California Air Pollution Control Officers Association  
18 hereby recognizes Lynn Terry for her dedicated service to  
19 the cause of clean air in California and expresses the  
20 association's appreciation through this Resolution adopted  
21 November 17th, 2014.

22           CHAIRPERSON NICHOLS: Thank you.

23           (Applause)

24           CHAIRPERSON NICHOLS: It's an amazing list of  
25 accomplishments.

1           And we have one more. This is from the San  
2           Joaquin Valley Air District, Shamir Sheikh.

3           MR. SHEIKH: Thank you very much, Madam Chair,  
4           for extending the time period for allowing us to make  
5           these comments.

6           We would be remiss as a region to not speak on  
7           behalf of the San Joaquin Valley for all the hard work  
8           that Lynn Terry has done for the valley. Sayed Sadredin,  
9           our Executive Director, expresses deep regret for not  
10          being here, given his high level of respect and years of  
11          working with Lynn on various issues. She's been critical  
12          in so many ways I can't better capture what was said  
13          earlier in the prior Resolutions. I don't want to preempt  
14          some comments that Board Members Sherriffs is going to  
15          share in just a little bit.

16          One of the things we really respect about Lynn  
17          and we know that moving forward given the excellent ARB  
18          team we have in place is going to continue has been her  
19          willingness to be really creative in the way that we  
20          explore various strategies for dealing with the air  
21          quality challenge that we have in the valley. She's  
22          gotten to know our stakeholders over the years. She's  
23          been very effective at looking for cost effective ways to  
24          reduce pollution in a way that has improved the air  
25          quality in the San Joaquin Valleys where we have attained,

1 for example, the PM standard through a lot of that hard  
2 work. We're at the verge here of attaining the one-hour  
3 ozone standard and continue to make significant air  
4 quality progress.

5 We do have a lot of work left to do. We have  
6 very significant air quality challenges. So we do express  
7 a lot of regret in seeing Lynn go, from a selfish  
8 perspective. As you said earlier, it really is good news  
9 overall. But there is a very selfish element here and  
10 really expressing that sadness in seeing her go.

11 But again, we know that there is a strong ARB  
12 team in place, through your leadership, through Lynn's  
13 leadership in developing that team. We are confident  
14 we're going to be able to continue that relationship  
15 moving forward.

16 Good luck, Lynn, in your retirement. Have a  
17 great retirement. We know you're not really going to stay  
18 away from work, just given your personality. But good  
19 luck with that.

20 CHAIRPERSON NICHOLS: Good luck. Thank you.  
21 That was great.

22 Dr. Sherriffs, did you have a presentation also  
23 or just a remarks?

24 BOARD MEMBER SHERRIFFS: Yes. I think we want to  
25 get some photographs with Shamir and Lynn and myself. But

1 in a minute.

2 CHAIRPERSON NICHOLS: Why don't we finish all of  
3 our speaking roles and then we can do photo ops.

4 BOARD MEMBER SHERRIFFS: I can read this and  
5 would love to, but the points have been made. The San  
6 Joaquin Valley represents some very unique challenges.  
7 Everybody talks about the meteorology and geography. But  
8 it's unique in terms of poverty and ag and land use and  
9 really in terms of culture, which really should probably  
10 be the cultures.

11 And over and over, as I read the whereases, you  
12 know, over and over, it's not just the flexibility but,  
13 indeed, it is the creativity looking for solutions, the  
14 sincerity, the honesty, the hard work, the goal-oriented  
15 partnership that Lynn has presented and always looking to  
16 find common ground.

17 And most important, I think it recognizes the  
18 commitment to finding the science and the money for the  
19 science to make good decisions.

20 So Lynn, this is the least controversial meeting  
21 I've been to since I've been on the Board. I think it's  
22 the first time every Board member has been at one of the  
23 meetings I've been to. And --

24 CHAIRPERSON NICHOLS: We're missing one.

25 BOARD MEMBER SHERRIFFS: It's a brave group.

1 It's not that they avoid controversy. But here they are  
2 all are. And I have to think it's really to recognize  
3 your mere 29 years of contributions. And really modeling  
4 what it means to be somebody working in the public sector  
5 to being a public servant and the best of all of that. So  
6 thank you.

7 CHAIRPERSON NICHOLS: Thank you.

8 Dr. Balmes.

9 BOARD MEMBER BALMES: Well, I have to take this  
10 opportunity to personally thank Lynn. I started working  
11 with her before she became a member of the Board, going  
12 way back to accepting an invitation to speak on  
13 environmental justice issues at a meeting I was  
14 organizing. And I want to say in particular I appreciated  
15 your efforts to deal with health disparities of air  
16 pollution impacts strongly on environmental justice  
17 issues. And I think so highly of your political skills  
18 that I was asked by the people putting together the Obama  
19 administration who might be a good candidate for Mary's  
20 old job as their Division Chief and I suggested you. But  
21 in fact, I'm glad that you didn't get the job because I  
22 got to continue to work with you here. So I wish you the  
23 best in your retirement.

24 CHAIRPERSON NICHOLS: It's possible that Lynn  
25 gets equal time. So okay.

1 Sandy, did you want to --

2 BOARD MEMBER BERG: I also would like to take  
3 just one moment to say thank you, Lynn. When I started in  
4 August of 2004, I honestly had no idea what I was getting  
5 into, other than it was such an honor to be asked so I  
6 said yes.

7 My first meeting was a mere four weeks later in  
8 September of 2004 in Los Angeles as we were adopting the  
9 Pavely greenhouse gas regulation for the vehicles. I had  
10 no idea. I was just barely understanding that CARB stood  
11 for California Air Resources Board. And so Lynn, I'm  
12 positive, was assigned to make sure to meet me at the  
13 elevator because she did every morning. And she was  
14 assigned to me I'm fairly certain at breaks to make sure  
15 that I would come back. And she kept escorting me to  
16 assure me that I would be fine. I understood this. I  
17 could do it. Get up there. Go, girl. You can handle it.

18 And then she said to me and I'll never forget  
19 this, "And our meetings are not always like this."  
20 Ten years later, I've reminded her several times they're  
21 more like this than not.

22 But you have been just exactly as Chairman  
23 Nichols outlined, the role model for all of us, but  
24 especially the women. It's been an honor to work with you  
25 in every way and we will miss you.

1           I think I told you that I've been in total denial  
2 thinking if I just didn't acknowledge that you were  
3 leaving, that maybe it would go away. But I couldn't be  
4 happier for you. This is well deserved. Thank you very  
5 much for not only your 29 years of service, but your  
6 friendship and your help for me over the last ten years.  
7 It's been a pleasure. Thanks.

8           CHAIRPERSON NICHOLS: Great. Excuse me.  
9 Supervisor Roberts.

10           BOARD MEMBER ROBERTS: I'll be brief. It's a  
11 bittersweet moment because Lynn is, first of all, you  
12 know, when you've been on this Board for a lot of years,  
13 you see a lot of coming and going. And Lynn's been like  
14 the stability here for a while. It seems like we had a  
15 lot of rookies here now, with all due respect.

16           But I also appreciate the way Lynn has handled  
17 herself and her assignment and has been -- I can't ever  
18 remember a time when the answer to a question didn't give  
19 me confidence in the full answer and helping me to better  
20 understand. So we are going to miss you. I guess we have  
21 to break in everybody else for a few more decades and then  
22 we'll be okay.

23           CHAIRPERSON NICHOLS: We'll whip them into shape  
24 I'm sure.

25           BOARD MEMBER ROBERTS: Thank you for your

1 service.

2 BOARD MEMBER RIORDAN: Lynn, let me also express  
3 my appreciation to you for all these wonderful years. I  
4 don't remember when Lynn wasn't here to help us, and  
5 that's quite a long time.

6 But what I think is most important, that little  
7 part of the Resolution, we laugh, but there were some 17  
8 big cartoons of SIPs that went to wherever they went to.

9 DEPUTY EXECUTIVE OFFICER TERRY: They went to  
10 Mary.

11 CHAIRPERSON NICHOLS: Exactly.

12 BOARD MEMBER RIORDAN: I hope you read every  
13 single one.

14 CHAIRPERSON NICHOLS: Just like I read every page  
15 of every Regulation.

16 BOARD MEMBER RIORDAN: The important thing was  
17 that was the first. That was the first. And I think we  
18 as Californians ought to be very proud of that and say  
19 thank you to Lynn because that was no easy task. And  
20 that's why you should have read every page, because it was  
21 not an easy task to bring California along, everybody  
22 along, and get that together.

23 So, Lynn, we say thank you for that and you enjoy  
24 this retirement.

25 (Applause)

1           CHAIRPERSON NICHOLS: I think that may be it for  
2 the official presentation. And we'll just enjoy a little  
3 social time upon adjournment. So we are adjourned. Thank  
4 you everybody.

5           (Whereupon the Air Resources Board meeting  
6 adjourned at 11:44 AM)

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