MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

AUDITORIUM

21865 E. COPLEY DRIVE
DIAMOND BAR, CALIFORNIA 91765

FRIDAY, OCTOBER 24, 2014 8:29 A.M.

TIFFANY C. KRAFT, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 12277

APPEARANCES

BOARD MEMBERS

Ms. Mary Nichols, Chairperson

Ms. Sandy Berg

Mr. Hector De La Torre

Mr. John Eisenhut

Supervisor John Gioia

Mayor Judy Mitchell

Mrs. Barbara Riordan

Supervisor Phil Serna

Professor Daniel Sperling

Dr. Alex Sherriffs

STAFF

Mr. Richard Corey, Executive Director

Dr. Alberto Ayala, Deputy Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Ms. Lynn Terry, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

Ms. Kim Heroy-Rogalski, Manager, Strategic Planning and Development Section, MSCD

Ms. Terry Roberts, Manager, Sustainable Communities Policy and Planning Section, AQPS

Mr. Todd Sax, Assistant Division Chief, MSCD

APPEARANCES (CONTINUED)

ALSO PRESENT

- Ms. Heather Adamson, AMBAG
- Ms. Christine Barker, Fresno Metro Ministry
- Mr Fernando Cazares, NRDC
- Mr. Andrew T. Chelsey, San Joaquin COG
- Mr. Cary Drake, US EPA
- Mr. Ahron Hakimi, Kern COG
- Mr. Bill Higgins, CALGOG
- Ms. Bonnie Holmes-Gen, American Lung Association of California
- Mr. Hasan Ikhrata, SCAG
- Ms. Rebecca Long, Metropolitan Transportation Commission
- Mr. Joe Lyon, Coalition for Clean Air
- Mr. Mike McKeever, Sacramento Area COG
- Mr. Matt Miyasato, South Coast Air District
- Mr. Jaime Moncayo, Leadership Counsel for Justice & Accountability
- Mr. Richard Raya, Climate Plan
- Mr. Charles Stoll, SANDA
- Ms. Carol Sutkus, Manager, South Coast AQMP Section, AQPS
- Mr. John Wall, Cummins
- Mr. Carlos Yamzon, Stanislaus COG

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1 PROCEEDINGS 2 CHAIRPERSON NICHOLS: Good morning, everybody. 3 Welcome back to the Air Resources Board October meeting. There is the second day of our two-day meeting here in 4 Diamond Bar. 5 We will start this morning with the Pledge of 6 7 Allegiance. 8 (Whereupon the Pledge of Allegiance was 9 Recited in unison.) 10 CHAIRPERSON NICHOLS: Madam Clerk, would you 11 please call the roll? 12 BOARD CLERK JENSEN: Mr. Balmes? 13 Mr. Berg? 14 Mr. De La Torre? 15 Mr. Eisenhut? 16 BOARD MEMBER EISENHUT: Here. 17 BOARD CLERK JENSEN: Supervisor Gioia? 18 BOARD MEMBER GIOIA: Here. 19 BOARD CLERK JENSEN: Mayor Mitchell? 20 Mrs. Riordan? BOARD MEMBER RIORDAN: 21 Here. 22 BOARD CLERK JENSEN: Supervisor Roberts? 23 Supervisor Serna? 2.4 BOARD MEMBER SERNA: Here. 25 BOARD CLERK JENSEN: Dr. Sherriffs?

1 BOARD MEMBER SHERRIFFS: Here.

BOARD CLERK JENSEN: Professor Sperling?

BOARD MEMBER SPERLING: Here.

BOARD CLERK JENSEN: Chairman Nichols?

CHAIRPERSON NICHOLS: Here.

BOARD CLERK JENSEN: Chairman Nichols, we have a

7 quorum.

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CHAIRPERSON NICHOLS: Great. Our first two items are consent items, but I'll take them up separately. I guess before I do that, I should make the routine announcement that anyone who wants to speak, if you're not familiar with our procedures, should please check in with the Clerk so she can get your name on the LIST prior to the commencement of the item. And we will be imposing a three-minute time limit on oral testimony.

Also, please observe the emergency exits that are in the rear of the room. In the event of a fire alarm, we need to evacuate this room.

The first item on our agenda, which is a consent item, is a public meeting to consider minor updates to the 1997 8-hour ozone standard State Implementation Plans for Coachella Valley and the Western Mohave Desert ozone non-attainment areas.

Is there anyone who signed up to speak on this item?

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BOARD CLERK JENSEN:
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                                  No.
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             CHAIRPERSON NICHOLS: Does any Board member wish
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    to take it off the consent calendar?
                                           If not --
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             BOARD MEMBER RIORDAN: Madam Chairman, staff has
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    briefed me, and I want to thank them for working with us
    and I would move Resolution 14-29.
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             BOARD MEMBER SHERRIFFS: Second.
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             CHAIRPERSON NICHOLS: All in favor, please say
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    Aye.
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             (Unanimous aye vote.)
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             CHAIRPERSON NICHOLS: Any opposed?
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             Any abstentions? Great.
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             The second item is a public meeting to consider
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    the supplemental document for the San Joaquin Valley
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    24-hour PM2.5 State Implementation Plan. And again, we
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    have no witnesses who signed up to testify. No Board
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    member who wishes to take it off consent. Very good.
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    Then I will appreciate a motion to approve.
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             BOARD MEMBER SHERRIFFS: Motion to approve.
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             CHAIRPERSON NICHOLS: Very good. Second?
             BOARD MEMBER EISENHUT:
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                                     Second.
22
             CHAIRPERSON NICHOLS: All in favor say aye.
             (Unanimous aye vote.)
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             CHAIRPERSON NICHOLS: Opposed?
25
             Carried.
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Now we will begin a report on reductions achieved from incentive-based emission reduction measures, update on the Board's California heavy-duty truck program which is the Board's program, past, present, and future.

Mr. Corey, this goes to you.

The purpose of this report here is to update the Board on our current plans to develop the next phase of heavy-duty greenhouse gas emission standards which we're working on in collaboration with our two federal partners. And this is an interesting program, of course, because California has its own very robust heavy-duty program, which is already providing significant emissions reductions from trucks and buses. But these have been essentially vehicles which operate in the interstate commerce situation. So we have always the desire and the need to have cooperation with the federal government as well.

Staff's presentation is going to provide an historical overview as well as describe our current heavy-duty programs and then preview our efforts to strengthen these programs.

So Mr. Corey, would you please begin?

DEPUTY EXECUTIVE OFFICER COREY: Yes, thank you,
Chairman.

The informational presentation will provide an

overview of nearly of component of ARB's program for controlling emissions from heavy-duty engines and vehicles from the time they're certified for sale until they're ultimately retired, which makes over million miles of operation for certain vehicles.

Staff will also describe how ARB's program work together to reduce the emissions from heavy-duty engines in vehicles, including new engine certification standards, durability emissions warrantee, and on-board diagnostics system requirements, roadside and fleet inspection programs, and in-use rules designed to accelerate the fleet updates.

The presentation falls on the heals of workshops that staff conducted this past September regarding developments in advanced zero and near-zero emission technology for heavy-duty emissions in vehicles may significantly assist California in attaining its future air quality and climate goals. The culmination of these technology assessments will be released shortly and serve as the foundation for the sustainable freight strategy that staff will discuss with you all at the December Board meeting.

So presentation also sets the stage for the developments of the upcoming state implementation strategies necessary to attain federal air quality

standards in the South Coast and San Joaquin Valley area basin as well as future more stringent greenhouse gas and NOx standards for heavy-duty engines and vehicles.

Kim Heroy-Rogalski of the Mobile Source Control Division will now give the staff presentation. Kim.

(Thereupon an overhead presentation was presented as follows.)

MANAGER HEROY-ROGALSKI: Thank you, Mr. Corey.

And good morning, Chairman Nichols and members of the

Board.

As you know, the ARB has in place a successful comprehensive program that significantly reduces criteria pollutants and greenhouse gas emissions from new and existing heavy-duty trucks.

Today's informational presentation is to update you on our current heavy-duty vehicle program and discuss staff's recent evaluation of the program and areas identified for improvement.

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MANAGER HEROY-ROGALSKI: Here's an outline of my presentation. After a short introduction, I'll provide an overview of ARB's current heavy-duty truck program, including both new engine standards and in-use requirements.

Next, I'll discuss staff's recent evaluation of

the program and some opportunities we've identified to improve several program areas.

Then I'll talk about ongoing development of federal Phase 2 greenhouse gas emissions standards for medium- and heavy-duty trucks. This future rulemaking is the transportation centerpiece in President Obama's Climate Action Plan.

Finally, I'll mention our efforts to encourage greater use of near- and near-zero emission of heavy-duty vehicles. Such vehicles will be crucial for California to attain federal ozone standards and meet our climate change goals.

So first let's turn to the introduction.

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MANAGER HEROY-ROGALSKI: Different thresholds are used for what's considered heavy duty. Sometimes 8500 pounds gross vehicle weight is used as the cut off and sometimes 14,000 pounds. But no matter how you define it, there are many heavy-duty trucks on the road in California and they contribute significantly to air pollution.

There are about two million trucks operating in California, over 8500 pounds gross vehicle weight, and nearly one million of those are over 14,000 pounds.

The trucks range from Class IIB3, essentially large pick-up trucks and vans, like the white pickup shown

in the lower photo, to class eight long haul tractor-trailer trucks like shown in the top photo.

Heavy-duty trucks overall are predominantly diesel powered, although gasoline is used in a sizable fraction for the smaller trucks. Although the population is greatest for the smallest trucks, the 2B3s, the emissions are dominated by class eight trucks, which have the largest engines and travel the most miles.

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MANAGER HEROY-ROGALSKI: Heavy-duty trucks over 8500 pounds are responsible for a third of the state's total NOx emissions and over a quarter of the diesel particulate matter. They also emit a fifth of the total greenhouse gas emissions associated with transportation sources, which is about eight percent of the statewide total. This's why our truck programs are so important. Without controlling this significant source, we can't expect to make progress overall.

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MANAGER HEROY-ROGALSKI: As I mentioned on the previous slide, heavy-duty trucks are responsible for a third of the state's total NOx emissions. NOx is a key ingredient in ozone pollution. So if we're going to attain ozone standards, further NOx control is critical. This is true in California today and may be true in many

more parts of the nation in the future.

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Many of these areas are in states with air quality representatives in the audience here today. The left map on the slide shows designations for the federal ozone standard. You'll see that for today's federal 8-hour ozone standard, 75 parts per billion, California has a near unique air quality challenge. Only California has areas classified as serious or extreme. See the red and yellow portions all clustered in California.

The right map shows a different story. U.S. EPA is currently in the process of reviewing the ambient ozone standard. It is considering levels between 60 and 70 PPB and action is expected later this year.

As you can see, many additional areas in the country will likely be newly designated as non-attainment, and existing non-attainment areas will have further to go to meet a more stringent standard. The turquoise, yellow, and orange dots on the right map indicate potential new ozone non-attainment areas.

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MANAGER HEROY-ROGALSKI: Now I'll provide a brief overview of California's current heavy-duty engine and vehicle program.

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MANAGER HEROY-ROGALSKI: The ARB has a long

history of establishing increasingly stringent emission standards for criteria pollutants from new engines in heavy-duty vehicles.

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Over the past 20 years, ARB has reduced NOx and PM standards for on-road heavy-duty vehicles by about 97 percent, as this chart shows. In 2013, California approved the federal Phase I greenhouse gas standards for trucks over 8500 pounds.

Later, I'll discuss our efforts in developing the next round of greenhouse gas standards called Phase 2. California's in-use programs, such as truck and bus regulation and other fleet rules, complement the new engine requirements by requiring technology upgrades and accelerated vehicle replacements.

In 2008, ARB approved the first-ever greenhouse gas emission reduction requirements for the largest heavy-duty trucks through the tractor-trailer greenhouse gas regulation. This regulation includes requirements for both new and in-use heavy-duty vehicles.

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MANAGER HEROY-ROGALSKI: The new engine emissions standards, which I showed on the last slide, are the foundation of ARB's heavy-duty vehicle program.

Manufacturers currently are required to comply with the emission standards on two test cycles to simulate

both urban and long haul driving.

In addition, each engine family must comply with the emission limits of the not to exceed, or NTE, test. To ensure that engines meet certification standards throughout their useful life and are repaired for emission-related component failures, manufacturers must submit durability test data and offer required warrantee coverage.

New heavy-duty engines are also required to employ on-board diagnostic or OBD, systems which include censors to monitor vehicles emission control systems and a check engine light to alert drivers if there is a problem. Although the overall emission standards are harmonized between California and U.S. EPA, some of our OBD requirements took effect earlier than the federal OBD program and in some cases include monitoring of more components.

Another unique element of California's program is the optional, low NOx standards adopt in 2013. These optional standards lay the groundwork for future mandatory lower NOx standards.

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MANAGER HEROY-ROGALSKI: I now want to highlight some of our programs to reduce emissions from in-use vehicles, that is the legacy fleet. Diesel engines last a

long time, enabling many heavy-duty vehicles to remain in operation for hundreds of thousands of miles.

As a result, fleet turnover to new vehicles equipped with lower-emitting engines is slow. New engine standards alone are not sufficient for California to attain federal air quality standards.

To address this, ARB implements programs to reduce criteria pollutants from the legacy fleet through fleet rules that require accelerated vehicle replacements and technology upgrades, limits on commercial vehicle idling time, and requirements for vehicle smoke inspections.

In addition, ARB offers incentive funding through the Carl Moyer and Prop. 1B Goods Movement Programs to assist fleet owner in replacing older, higher-emitting engines, and vehicles.

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MANAGER HEROY-ROGALSKI: New engines and fuels requirements coupled with programs to reduce emissions from the legacy fleet are successfully working together to significantly reduce diesel emissions and the associated air toxic risk.

Based on the multiple air toxics exposure study, or MATES, draft report for 2012 through 2013 called MATES IV, overall cancer risk has decreased more than 50 percent

between 2005 and 2012 in the South Coast region.

Monitoring, inventory, and modeling approaches all show similar results demonstrating that ARB's heavy-duty vehicle program is providing verifiable benefits in the region of California and experiences the most severe air quality challenges.

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MANAGER HEROY-ROGALSKI: ARB's current program also provides climate benefits. As I mentioned earlier, ARB's tractor-trailer greenhouse gas regulation, an AB 32 early action measure, requires improved aerodynamics and tires for long-haul tractors and trailers operating on California roads.

California also approved the federal Phase I greenhouse gas standards, which begin with the 2014 model year. This chart illustrates the Phase I standards greater than 20 percent reduction in CO2 emissions for Class 8 sleeper cab trucks.

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MANAGER HEROY-ROGALSKI: So I'll now move on to discuss the staff's recent program evaluation.

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MANAGER HEROY-ROGALSKI: As you recall, truck owners voiced their concerns about diesel PM filters at the Board meeting last October. These concerns generally

focused on filter performance, durability, and vehicle down time associated with repairs.

In response, staff initiated a technology evaluation and presented the Board an introductory status of date in April. Today, I'll summarize staff's evaluation. Because the final data analysis is still ongoing, staff plans to provide you a complete report in writing later this year.

To perform the evaluation, staff inspected about 400 trucks and 41 fleets concerned with filter issues and reviewed their maintenance records. Additionally, staff conducted over 600 roadside inspections and truck driver surveys. In this total, staff inspected and collected data from over a thousand heavy-duty diesel trucks, in addition to reviewing warrantee, emissions, and maintenance data, and surveying filter manufacturers and installers.

As staff delved deeper into its evaluation, we uncovered issues related to endurability and in-use NOx emissions and thus focus their efforts in those areas as well.

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MANAGER HEROY-ROGALSKI: In general, staff found that filters are working as designed. When functioning properly, a filter virtually eliminates all particulate

emissions. Several roadway and vehicle testing studies validate that properly functioning PM filters effectively reduce diesel PM emissions and other compounds toxic to human health.

In addition, staff confirmed that warrantee claim rates for filters are low, both for retrofit filters and most original equipment filters.

As I'll expand upon more in the next slide, staff found that filters appear to be uncovering underlying problems with engines and emission control systems due either to flawed components, inadequate maintenance, or some combination thereof. I'll talk more about preventative maintenance later.

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MANAGER HEROY-ROGALSKI: While staff concluded that diesel particulate filters are generally working as designed, they also confirmed that some fleets were experiencing filter problems. The vast majority of these problems appear to be due to other engine malfunctions that, when not addressed, affect filter performance and durability.

For example, failed turbo chargers may be leading to high PM rates that clog filters. Rather than being the source of the problem, it appears that diesel particulate filter are uncovering preexisting engine issues. A small

fraction of engine issues can even damage PM filters, thus reducing their effectiveness.

To understand the extent of some issues, staff examined heavy-duty engine warrantee claims data for the past decade. Data indicates that heavy-duty warrantee claim rates are much higher than we expect and much higher than we typically see for light-duty vehicles. In fact, for some recent model years, we are seeing on average more than one warrantee claim per engine.

It's also important to know that the warrantee period generally covers only 100,000 miles, whereas it's common for heavy-duty trucks to operate for 800,000 miles and more. Extending warrantee periods to facilitate quicker repairs and hold manufacturers responsible is one option for improving engine durability and emissions performance.

ARB also needs additional statutory authority to hold heavy-duty engine manufacturers more accountable for their product lines.

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MANAGER HEROY-ROGALSKI: As you've already heard, ARB has adopted increasingly stringent engine certification standards over the last two decades with today's engines generally coming new with selective catalytic reduction, or SCR, NOx control. While SCR is

very effective in high speed, high engine load cruise conditions, it's less effective in stop-and-go driving conditions because the system catalyst requires a minimum operating temperature to function effectively.

Hence, excess NOx is of particular concern for stop-and-go operations, like local delivery trucks that spend a significant time at low speed, low load.

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MANAGER HEROY-ROGALSKI: Based on the findings so far from the program evaluation, I'll now discuss possible improvements to ARB's existing heavy-duty vehicle program that we think can achieve additional criteria pollutant reductions and help better are address truck owners' concerns.

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MANAGER HEROY-ROGALSKI: First, we're looking for ways to ensure heavy-duty engines and emission controls remain more durable. For example, I mentioned earlier expanding warrantee requirements. Staff is also considering improvements to the in-use compliance testing program, under which ARB can bring trucks in for testing to see how their emissions are performing in use.

Staff is also looking for ways to improve truck preventative maintenance. As we spoke with fleet maintenance personnel and truck drivers during the program

evaluation, one finding that became clear was that as truck technology has evolved, truck maintenance practices have not always kept up. To address this, ARB staff has joined with the trucking industry, engine manufacturers, and retrofit installers in a preventative maintenance working group. This group aims to develop maintenance best practices and then disseminate this information to truckers.

A third way to help ensure better durability is to improve our current smoke inspection program through stricter opacity standards, taking fuller advantage of truck's OBD systems and potentially other methods.

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MANAGER HEROY-ROGALSKI: In addition to the program improvements I've already discussed, we recognize the need for future lower mandatory NOx standards for new engines, given the magnitude of California's air quality challenges.

To lay the technical foundation now, ARB is leading research at the Southwest Research Institute to demonstrate diesel and natural gas engines that could be certified to 90 percent below today's NOx standard.

As we work on the next generation of new engine standards, we have three goals in mind.

First, the need for lower national NOx standards

for new truck engines. We will continue to coordinate with U.S. EPA on the development of new, national lower NOx standards for heavy-duty trucks. Since more than half the heavy-duty trucks operating in California typically have been purchased out of state, national standards are key.

Second, stronger durability requirements and expanded warrantee periods to encourage manufacturers to produce high-quality engines and that remain low emitting.

And third, the need for broader in-use compliance testing and inspection maintenance to ensure heavy-duty vehicles continue to operate cleanly.

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MANAGER HEROY-ROGALSKI: So I just talked about program improvements to get more NOx and PM reductions.

Now I'm going to discuss further reducing greenhouse gas gases.

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MANAGER HEROY-ROGALSKI: While the Phase I greenhouse gas standards were based on off-the-shelf technologies, Phase 2 standards are expected to be more technology-forcing. To demonstrate advances in engine, drive train, and vehicle efficiencies in class eight trucks, the Department of Energy has awarded 115 million to four teams participating in the Super Truck Program.

Including private industry investments, the total program cost is approximately 270 million. The program seeks to demonstrate further improvements in both engine and vehicle design and to achieve a 50 percent increase in overall tractor-trailer and engine efficiency by 2015.

Four teams have signed up to work on the Super Truck Program: Cummins, Daimler, Navistar, and Volvo. Recently, the Cummins team demonstrated a 43 percent improvement in greenhouse gas emissions and fuel consumption rate.

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MANAGER HEROY-ROGALSKI: Shown here are the key sources of energy loss in a tractor-trailer. As you can see, there are multiple sources of energy loss, but the two main ones are engine and aerodynamic losses. The remaining sources of energy loss as shown, include rolling resistance, auxiliary loads, drive train, braking and idling. Reducing these energy losses can improve fuel economy and reduce greenhouse gas emissions.

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MANAGER HEROY-ROGALSKI: ARB staff has been cooperatively working with U.S. EPA and the National Highway Traffic Safety Administration over the past year to develop the scope and stringency of the Phase 2 standards. U.S. EPA is scheduled to release its notice of

proposed rulemaking in early 2015 and is on schedule to adopt the final rule in March of 2016. Upon federal adoption of the Phase 2 program, staff plans to bring a proposed California Phase 2 program before the Board in mid-2016.

The Phase 2 standards represent a significant opportunity to achieve further fuel economy improvement and greenhouse gas reductions for 2018 and later model year heavy-duty vehicles, including trailers, which were not included in the Phase I program.

Based on the National Academy of Science's 2010 report, Phase 2 standards can potentially reduce CO2 emissions an additional 13 to 25 percent beyond Phase I, depending on the vehicle classification. The American Council for an Energy Efficient Economy and Union of Concerned Scientists recently confirmed these estimates, estimating Phase I and II standards combined could cut fuel consumption in new trucks by at least 40 percent when compared to 2010 levels.

Based on ARB own staff's technical assessments, we agree this 40 percent CO2 reduction for the combined Phase I and II programs is technologically feasible.

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MANAGER HEROY-ROGALSKI: Shown here are some of the various technologies that we expect engine and vehicle

manufacturers may use to achieve Phase 2 compliance.

Overall, Phase 2 will require the use of optimized advanced engine and drive train technologies, engine down-sizing and lighter weight components, and improved aerodynamics for both vehicles and trailers.

Staff plans to report back to the Board mid next year with a more detailed Phase 2 update after U.S. EPA releases its Notice of Proposed Rulemaking.

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MANAGER HEROY-ROGALSKI: Some strategies that could be used to improve fuel economy and comply with the Phase 2 standards could make it more difficult to control NOx. Conversely, some strategies to reduce NOx can have a fuel economy penalty. However, simultaneous reductions in NOx and greenhouse gas emissions are possible. The key will be for engine and truck manufacturers to design integrated systems, keeping the needs to reduce both NOx and greenhouse gas emissions in mind. Many technology and strategies, such as hybridization, improved aerodynamics, low rolling resistance tires, and reduced idling reduce both NOx and greenhouse gas emissions.

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MANAGER HEROY-ROGALSKI: I've already discussed today efforts to improve fuel efficiency to further reduce emissions for tomorrow's heavy-duty vehicles. To meet our

longer-term air quality and climate change goals, we need to greatly expand the use of zero and near-zero emission technologies. As you saw yesterday in the zero emission vehicle showcase, ultimately we expect to see these technologies mainstreamed into the heavy-duty vehicle sector.

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MANAGER HEROY-ROGALSKI: Over the past year, ARB staff have collaborated with our air district partners to evaluate the current state of various mobile source technologies and fuels and assess the potential of promising advanced technologies for use within the next decade.

The heavy-duty engine and vehicle sector has been a major component of this technology assessment and included separate staff teams evaluating different advanced technology sectors, such as hybrid, battery electric, and fuel cell, as well as improvements to diesel and natural gas engines.

The technology assessments have evaluated well to wheel emissions for a variety of fuel types and technologies, identified infrastructure needs, and highlighted the most promising areas for ARB to focus its demonstration and incentive funding efforts.

Staff held a series of workshops in September to

present the initial results and are currently working to finalize their findings.

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MANAGER HEROY-ROGALSKI: One of the main ways
California government can foster advanced technology
development and deployment is by investing in technology
demonstrations and deployment.

Together, ARB and the California Energy

Commission are currently distributing 200 million annually
in such funding with much of these funds being generated
by greenhouse gas auction proceeds. That is cap and trade
funds.

ARB and CEC are funding a diverse portfolio of heavy-duty projects, including demonstrations, pilot deployments, infrastructure, and use of renewable fuels. This past June, the Board directed up to \$85 million in ARB's heavy-duty vehicle funding to hybrid and zero and near-zero truck and bus demonstration and deployment projects. All of these funds are moving technologies along the development path, from research and development, through demonstration and pilots, toward commercialization and widespread use.

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MANAGER HEROY-ROGALSKI: So to wrap up today's presentation, our existing heavy-duty truck programs have

been effective, but further improvements are possible. And there's lots to do to encourage technologies that advance us along the pathway to zero emission.

The upcoming Phase 2 greenhouse gas emission standards will be an important next step in making trucks more fuel efficient and cutting CO2 emissions.

Finally, the technology assessments currently underway are laying the foundation for future regulatory development and state implementation plans.

Thank you. We'll now be happy to respond to any questions or comments you have.

CHAIRPERSON NICHOLS: Thank you.

We have a couple of people who signed up to speak to us. So why don't we hear from them first. This is obviously not an action item today, but I think we will want to have some comments in general.

BOARD MEMBER SPERLING: Can I ask some clarifying questions? So a great overview. The two slides that kind of concerned me a little. The ones -- I think it's 15 and 16 talking about the engine durability and the NOx controls in-use emissions. And I'd just like to understand what exactly you're talking about, because at least -- if we're talking about class eight trucks the first few years, the majority of those are being used by big fleets, long haul. I would think they're maintained

well.

And so the idea that there is maintenance issues or that there's problems seems kind of odd to me, unless we're talking about much later in the life of these trucks. And you know, there is NOx issues also. But can you explain that? What's really going on here? Because it sounds like there is a real problem.

And also to quantify, is there any quantification of how many we're talking about and how much higher are these emissions really.

DEPUTY EXECUTIVE OFFICER AYALA: Let me get it started and frame it for you at a higher level and then we'll have staff give you additional detail.

When we set out to try to understand the question in terms of the effectiveness of the filters, we went to the field study that staff discussed. And in addition to that, we also looked at the information that is reported to the agency as part of the certification program. And as we started peeling the layers of this onion, we discovered, as staff reported, that, indeed, the filters are working as designed. But they are not installed and forget technology. You really have to pay attention to other things that are going on with the engine. It's a bit of the cannery in the mine type of thing.

What we learned as we started looking at the

warrantee reporting that the manufacturers are submitting to us on a regular basis, we started uncovering a number of warrantee claims and other issues with components in the engine like turbo chargers and EGR valves and that start of thing. When you have one of those components not operating as designed, that problem can be manifested as a filter problem. And really to sum it up from our staff's perspective, what we are uncovering is an uncomfortable high number of warrantee claims and such issues with components and engines that should be a lot more durable.

And I think that's what we're trying to point to here. That really we should be expecting a higher level of quality in terms of the products that are being put on the market and the reports we're looking at are not suggesting that we have that high level of quality. And obviously, we have a reference point in terms of what we see for the light-duty sector. That's really what we're trying to indicate here.

And as staff said, unfortunately, at the moment we don't have the flexibility to actually do much about it. That's one of the key issues we're going to be working on. Because again statutorily, there is limited action that we can take.

So let me turn to staff so see if they want to add something.

ASSISTANT DIVISION CHIEF SAX: Todd Sax. I can talk about a couple of things. I can talk about in-use NOx. One of the things that we noticed in the testing that we've done both in chassis dynamometer testing and also in portable emissions measurement testing is that under low temperature, low load operations, the selective catalytic reduction device doesn't operate as efficiently as it does at high speeds. And the net result of that is what we term vocational applications for truck operations, you don't necessarily get the same level of NOx control that you would in over-the-road on the freeway applications.

And that isn't to say that the trucks aren't providing a NOx benefit. They are actually when we look at the test data, the trucks that are certified in the 2010 standard for NOx are much cleaner than any of the trucks that have been manufactured before them. But in vocational applications, we think that there's more that can be done to bring additional reductions out of the aftertreatment systems to continue to achieve NOx reductions.

CHAIRPERSON NICHOLS: This is a recap of the discussion that we had on more than one occasion during the hearings on our truck and bus rule. And I don't think staff is adding anything new here. They're looking to

expand their jurisdiction to some degree. We may need legislation in this area, quite frankly. And I think that it's sort of an -- you have to balance a little bit because we think that these past programs have achieved results, but they haven't been as much as we hoped.

Any other clarifying questions before with turn to the people who asked to speak to us? Okay. If not, Matt Miyasato from the South Coast Air District.

MR. MIYASATO: Good morning, Chairman Nichols members of the Board.

I just want to acknowledge Mayor Judy Mitchell who sits on this Board, usually on this seat. For the record, I met with some of the Deputy Executive Officers on science technology advancement here at the South Coast air basin. I'd like to thank the staff, not only for the overview that you provided today, but also for involving the air districts in the technology assessment because heavy-duty trucks are near and dear to our hearts. As you heard from Dr. Wallerstein yesterday, Dr. Joe Lyou and Mayor Mitchell, we have a monumental challenge before us in the South Coast to reduce our NOx emissions by 2023 over 60 percent.

And heavy-duty trucks, if you remember that bar chart that Dr. Wallerstein showed, medium and heavy duty trucks are at the top of the bar chart. They represent

the largest sector of NOx emissions. We believe that's the area where we have the potential greatest emissions reductions potential for NOx.

And, oh, by the way, if you reduce NOx emissions with technologies, you also get reduction in diesel particulate, which again Dr. Wallerstein showed is still the largest contributor to air toxics in our region. Although air toxics have reduced emissions, diesel particulate is still the number one contributor to air toxics.

So because of this, we've been focusing on developing, demonstrating, and commercializing near-zero and zero emission technology that your staff had suggested. To be clear, when I say near zero, I'm talking about a working definition of 90 percent lower than existing standards. So .02 grams per break horsepower hour. And the technologies that we're investigating span the gamut from cleaner .02 gram heavy-duty natural gas engines to plug-in hybrids with all-electric range. So if you think of like a large Chevy Volt, fuel cell range extended trucks, battery electric trucks, several of which you saw out in the parking lot yesterday, to even trucks that are running on trolly lines, much like the buses that you see in the San Francisco area.

So although we're working on developing and

demonstrating these technologies with the California

Energy Commission as well as Department of Energy, as well
as other stakeholders in the region, where we really need
your help is the last couple slides your staff showed is
in the commercialization of this technology. As you know
from your experience with ZEV, you not only need
technology push, but you need market pull. So we need
your help in identifying opportunities, regulatory and
policy wise, to help the technology push as well as
incentivication for the market pull, for looking at
incentives not only to establish the early market, but to
keep the early market and then go for fleet penetration.

So we thank you and your staff for the comprehensive overview that you've undertaken with the technology assessment. But now the hard work begins. So we want to work closely with you to identify the answers for the two questions: How do we implement and commercialize the technology? And how do we accelerate the deployment, especially here in the South Coast where we need those emission reductions so desperately. So thank you.

CHAIRPERSON NICHOLS: Thank you.

John Wall of Cummins.

MR. WALL: Good morning, Chair Nichols and members of the Board.

Thanks for the opportunity to comment in support of the Phase 2 greenhouse gas standards for heavy-duty vehicles and engines.

I'm John Wall, the Chief Technical Officer of Cummins. We're the world's largest manufacturer of automotive diesel engines and automotive natural gas engines.

We think the challenge of climate change is extremely important in air quality. So we're certainly committed to continue to collaborate with the staff and innovate work with industry partners and our customers to respond to the challenge and with durable products.

In the short term time, I'd like to speak to the measure of the rule. The Phase I greenhouse gas and fuel efficiency rule really provides a very strong foundation to move forward in Phase 2 and deliver on two important principles: Regulatory integrity and business consistency. Regulatory integrity to us means your intended improvements in emissions are assigned appropriately and directly to the engine and the vehicle are realized in real world use and can be physically verified and enforced.

This business consistency means the regulation does not interfere with the structure and functioning of established business relationships among component and

vehicle manufacturers and their customers and maintains a level player field for all competitors. The critical element of the Phase I rule that delivered on these principles was a separate engine standard in addition to the vehicle level standard.

Some have called for elimination of the vehicle and component standard -- or the engine and component standards and just the vehicle level standard in Phase 2. The vehicle standard in Phase I that is planned for Phase 2 is based on computer simulation. It's useful for dealing with the diversity of vehicles in calculating CO2 emissions at that level, but problematic for translating apparent benefits into real world effects.

These trucks are very different than passenger cars. As you know, they're not just one piece. They're two pieces. The tractor and trailer are all interchanged in use. So there are no integrated vehicle tests that allow you to test at the vehicle level and enforce it in use.

So you can calculate a very nice reduction in CO2 emissions with the computer simulation, but in use in the real world, if the tractor is pulling a different trailer, if different tires are being used, then the calculated CO2 emissions are really not being realized. So while it's useful, that vehicle level standard in the computer

simulation does not deliver regulatory integrity.

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A separate engine standard regulates the source of CO2 emissions, the engine, directly and provides clear direction to manufacturers for technology investment that is needed. It ensures that the projected CO2 emissions are realized regardless of the vehicle application and configuration. It can be physically verified and enforced with protocols that have been honed by ARB, EPA, by the industry over the past three decades. And by using these protocols, you can keep CO2 and NOx linked. NOx being very important to the state of California. You don't want to give one up for the other.

So these test protocols allow us to regulate both simultaneously. It would also --

CHAIRPERSON NICHOLS: Your time is up.

MR. WALL: Sorry. I'm on a roll. In any case, I think you got the point.

CHAIRPERSON NICHOLS: We do.

MR. WALL: We appreciate the time you've given us to comment. There's some written comments.

CHAIRPERSON NICHOLS: We will look at the comments, and we may have questions for you later if you're going to be here. So thank you. Bonnie Holmes-Gen.

MS. HOLMES-GEN: Good morning.

Association of California. And I also wanted to present some comments on be ha affirmation both the Lung Association and the Union of Concerned Scientists basically supporting the great work that your Board is doing to move towards stronger heavy duty standards, both at the state level and at the federal level. And we strongly support the efforts that you've been reporting on today to work with EPA and NHTSA to set these strong phase two standards and significantly ramp down climate emissions from heavy-duty trucks. It's an incredibly important sector from both our GHG reduction efforts and for our criteria pollutants, meeting our federal standards in the heavy-duty truck sector.

Emissions are expected to grow, unfortunately, because of the increase in goods movement activity and really need to ramp down those emissions.

We want to underscore the study that your staff presented today by the Union of Concerned scientists and other groups that emphasize the availability of technologies to reduce heavy-duty truck emissions by 40 percent for these 40 percent compared to 2010 levels. It's exciting that we have this new data and that we know technologies are available that can cost effectively reduce emissions, pay for themselves, reduce fuel costs to

owners, and achieve these health benefits. So we're excited about that.

And the final point is that we wanted to underscore the importance by focusing on standards that can integrate the achievement of nitrogen oxides, NOx, emissions reductions and the GHG. You've heard a lot about that. We wanted to underscore the importance of moving in that direction. And of course, a key way to address that is to pursue zero emission technologies.

I wasn't able to be at the technology showcase yesterday, but your webcam actually has some nice glimpses of the showcase. And you have great press conference. But we are really excited to continue working with you on the zero emission solutions through cap and trade funding incentives, the AB 118 program, and anything we can do, we want to partner with you to move forward on the zero emission technologies. Thank you so much.

CHAIRPERSON NICHOLS: Thank you. And that concludes the list of witnesses who signed up. So just so bring the conversation back to the Board, this is just a status report. But things are moving fairly quickly with respect to the EPA. As you heard, they're about to come out with a proposal early next year. It's an important part of the President's Climate Action Plan. So we are going to be actively at the table.

I think it's fair to say we are concerned and a couple reasons to be concerned. One is the potential for a proposal that is not sufficiently ambitious, given pressures that will be coming, clearly coming from people who are going to be effected directly by the rule.

But the other thing that I think we have to keep our eye on is this issue of how to make sure we're not doing anything that precludes or interferes with our ability to move forward with the tighter NOx standards. So this is sort of a regulatory artistry issue as much as it is a technology issue.

We had some conversation about that last year.

But I mean, yesterday, how soon we forget -- just

yesterday. But I think this is an area where Board

members are going to be hearing a lot in the weeks and

months to come and would appreciate your input as well as

your usual attention to making sure that ARB is in a

position to maintain the strong posture on this.

As you know, for the last several years, we've been working very hard at trying to integrate our activities more and more with the federal government in order to save everybody the costs -- transactions costs of multiple tests and so forth and to be on the same path.

But this is one of those issues where it may be necessary for ARB to actually propose something that is

beyond what the federal government is prepared to do because of our unique air quality needs. It's something that I think will be resource-intensive and will be a major commitment.

But if we look at what we've been through for the last several years, dealing with the in-use vehicles -- and you realize how incredibly long these engines and vehicle stay on the road and how conservative the industry is, it's just it doesn't make sense to let one of those rare opportunities go back when you've got the potential to shape what the technology is going to be like for literally decades to come into the future.

And the issue that Dr. Sperling was inquiring further about in terms of the durability of the equipment is going to be a key part of this, because given the fact that they are dealing with equipment that's outdated for long periods and used very widely, it's just going to be important that we be mindful of the real world implications of some of these tests that may look good now but may not in the real world.

So if anybody has any additional comments or thoughts, if not we can move on. Yes?

BOARD MEMBER MITCHELL: I'd like to make a couple of comments.

Everything that you said I think is important.

But commercialization of this sector into the newer technology is very important and is an extremely heavy lift, as you said, because the truck life is very long.

But I also want to emphasize again the issues in the South Coast District and San Joaquin Valley, we need to have these extreme NOx reductions by 2023 and then again by 2032. And we're also looking at Phase 2 with even lower NOx standards. And that's important for public health, but it also puts an extra extreme burden on the South Coast district.

So I want to emphasize that the obligations to get this done rest with us. We are the regulators of mobile sources, and I think we, as a Board, must step up and see that this gets done and that the NOx reductions that are needed here in the South Coast and San Joaquin can actually be accomplished. And it's our job to get that done. I want to emphasize that. Thank you.

CHAIRPERSON NICHOLS: Thank you for that reminder. And also tying it to the comment that Mr. Miyasata made before about the dissemination of the new vehicles. So our job is not only to use our regulatory authority as well as we can, but also to do everything in our power to design the program that will get the best technology out there in the real world.

BOARD MEMBER SPERLING: So on this durability

question, I can't help but think there must be some better way of dealing with it. It seems that now that we have OBDs in all of these trucks and have for a number of years and GPS, there must be some better way of approaching it. We have so much data potentially available, and it's not only in terms of the durability, but it's even in the case that some areas have a much more severe pollution problem than others. It might not be that we want to have a uniform requirement for all trucks everywhere. Maybe because of OBD, because of GPS, we can create kind of pollution regions and think of some way that, you know, whether through pricing or even just some other mechanism that we could address it in a much more efficient and effective way.

It could be that if there is a high pollution area that you have -- if you're going to move your truck in that area, you pay a high fee. So a fleet would send in their electric trucks or their fuel cell trucks into those areas. So I just think, are we kind of thinking at all along those lines?

DEPUTY EXECUTIVE OFFICER AYALA: Certainly, I think the short answer is absolutely. I completely agree with you that we are at the cusp of unleashing a level of innovation in terms of not just cleaner engines and trucks, but really truly sustainable mobility.

Transportation solutions will actually get us what we need in terms of not only the NOx, but the GHG.

You're right, OBD is the starting platform. I mean, you know, we really want to learn from the lessoned learned and the fact for our cars and light-duty cars, we're going to be doing all IMN using the OBD system. We want to take those learnings and explore the potential the system has for the heavy duty trucks.

When you consider the trends in the industry in terms of connectivity vehicle to vehicle, vehicle to internet, et cetera, I think we are at the point of looking at the potentially doing exactly what you're saying, Dr. Sperling.

And part of the technology assessment that we are working on is trying to get into some of those areas so we can truly maximize the benefit in terms of increasing the efficiency of moving things and people as well as reducing the emissions at the core engine level.

BOARD MEMBER SPERLING: Have any specific ideas that we are exploring?

DEPUTY EXECUTIVE OFFICER AYALA: So the very idea that you suggested is something that we actually have been talking to a few manufacturers. And that is because the systems are getting to the level of sophistication that you can dial in, in certain areas, you can go into a mode

that will give you, say, low NOx emissions. In other areas, you can dial in highly efficient engine operation.

So obviously, technology that is zero as Dr. Miyasata talked about is going to be absolutely instrumental. So we're really exploring all the options at this point. I don't think that we've completed truly the in-depth assessment that we have in the works. And obviously, the input from the district and industry and other stakeholders is really going to get us down into what eventually is going to be the final solution.

But the future looks very promising. And again, I think the credit goes to the manufacturers who are the ones that are innovating and actually bringing us this great technology to the market.

CHAIRPERSON NICHOLS: I hear a little bit of a disconnect here. So I'm just going to weigh in.

I think what Dr. Sperling is suggesting, as he often reminds us, is that there may be ways that we can employ fees or other kinds of variable incentives in order to target the reductions where we need them to be.

I, of course, coming at this from a different perspective, see the headline "ARB adopts sacrifices for areas that are not going to get the cleaner trucks" and start to worry about the opposite.

But regardless of which of those points you come

from, it is true that our need for the additional control is so much greater than any other place that we know of, at least right now, that it's hard for us to get our federal counterparts to seriously consider the levels of control that we need to meet our needs here in southern California. So we're going to have to explore every idea that's out there, even ones that may have been looked at before but didn't seem to be applicable I think are going to have to be on the table.

So I do encourage you to think both about technology and about other tools that we could use at the same time.

BOARD MEMBER SPERLING: And Chairman Nichols, one more question for you. You made the comment that we might have to go a separate way from EPA. Were you referring to just NOx but also greenhouse gas emissions?

CHAIRPERSON NICHOLS: The two are -- the two of them are related to each other, obviously. We're dealing with the same engines, the same uses. So I think it's possible that we would want to try to do both.

I'm encouraging the staff, and I've told my friends and colleagues at EPA that they should expect us to at least be seriously considering that idea whether we would actually go through it or not. I think what we have to look at the cost and benefits of doing a separate

California standard.

But the fact is that we are the only counter weight that's out there to the views that are going to be heard very loudly in Washington at OMD and elsewhere that it doesn't make sense to push as far as we need to go.

I mean, we look at the technology and say 40 percent, sure. What about more? Why are we limiting ourselves to 40 percent? Let's think about doing something more ambitious.

And while that viewpoint might be discussed by friends, for example, from the environmental community, it would not have anything like the same impact as if California is actually seriously proposing to do something along those lines. So I think it's worth seriously pursuing.

Yes?

BOARD MEMBER SHERRIFFS: Thank you.

On Ms. Mitchell's comments, reminding us that 70 percent of the health risk of air pollution in the United States of America, the population that is affected is the South Coast and the San Joaquin Valley. So this really is critical to our state and critical to specific areas of the state. And depending how far that ozone level is set by the EPA, well, in some ways it will remind a lot of the United States about the issue, in a sense,

put us back in the game. They it may not appreciate it now, but it is important to their health.

CHAIRPERSON NICHOLS: Always a good reminder to bring this back to the health.

Okay. I think we should move onto our next item, which is a report on the incentive-based emission reduction measures in the San Joaquin Valley. How appropriate.

So we while the staff is switching places, I'll just note that California has made a substantial investment over the last 15 years in standardizing the introduction of new cleaner technology earlier than what the law and regulations otherwise would require.

Incentive programs provides significant emissions reductions across the state and are a critical part of meeting the state's SIP commitments for emission reductions in the San Joaquin Valley. In fact, there's I think nowhere what has deployed incentive programs as widely as the San Joaquin has.

Staff has been working with U.S. EPA to ensure that the state receives SIP credit for these emissions reductions. The report that we're considering today is one step in seeking U.S. EPA's approval to recognize the reductions from these incentive programs.

Mr. Corey, would you please introduce this item?

DEPUTY EXECUTIVE OFFICER COREY: Yes. Thank you.

In 2008, ARB adopted a SIP for the San Joaquin Valley to attain an annual PM2.5 standard by 2014.

In the SIP, ARB committed to reduce emissions to the levels necessary to achieve the PM2.5 standard through the ongoing benefits of existing control programs, new control measures, and programs the Board has adopted since SIP approval and from incentive programs.

The report quantifies emission reductions from the Carl Moyer and Prop. 1B incentive programs and demonstrates how these emission reductions can be counted towards meeting the emission reduction commitments in the San Joaquin Valley SIP.

And with that, Carol Sutkus sensitivity will present the staff presentation.

(Thereupon an overhead presentation was presented as follows.)

MANAGER SUTKUS: Thank you, Mr. Corey. And good morning, Chairman Nichols and members of the Board.

Today, I will provide you with an overview of staff's report on incentive-based emission reductions in the San Joaquin Valley.

This report serves as a mechanisms for the U.S. Environmental Protection Agency to approve emission reduction achieved through the Carl Moyer and Proposition

1B incentive programs as part of the State Implementation Plan, or SIP, for the San Joaquin Valley.

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MANAGER SUTKUS: Incentive programs play an important role in reducing emissions in California. They work hand in hand with regulations to provide emission reductions. And the early investment in advanced technology spurs commercialization of cleaner vehicles and equipment. These advanced technologies ultimately become commonplace.

Incentive programs were first included in California SIPs 20 years ago and have been a key component of the state's air quality strategy ever since.

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MANAGER SUTKUS: There are a broad variety of incentive programs available in this state that draw on a mix of local, state, and federal funding.

On a statewide basis, ARB works closely with the local air districts to distribute incentive funds and implement the requirements of the programs, including tasks such as inspections and audits. In turn, air districts tailor their incentive programs to meet their local needs.

Today, we are focusing on two successful incentive programs; the Carl Moyer Memorial Air Quality

Standards Attainment Program and the Proposition 1B Goods Movement Emission Reduction Program. These two programs have awarded a total of \$1.6 billion in California to date.

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MANAGER SUTKUS: The Carl Moyer Program has been in place for over 15 years and provides grant funding for cleaner than required engines and equipment.

Last year, ARB, local districts, and stakeholders collaborated to sponsor legislation to maintain Carl Moyer Program funding into the future.

Legislative action successfully reauthorized funding for the Carl Moyer Program through 2023.

To date, this program has awarded \$900 million, statewide, with \$151 million in the San Joaquin Valley, replacing over 5,000 highly polluting engines.

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MANAGER SUTKUS: The Proposition 1B program was established by voters in 2006 to reduce health risks along trade corridors. The program funds emission reductions from activities related to the movement of freight. To date, over \$700 million have been awarded for projects throughout California. In the San Joaquin Valley, \$145 million have been awarded, replacing about 3,000 highly polluting engines.

The Board adopts guidelines that specify how the programs are implemented. These same guidelines also provide the basis for demonstrating to the U.S. EPA that the reductions achieved meet the requirements of the Clean Air Act.

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MANAGER SUTKUS: When the Board adopts a SIP, it makes legal commitments to take specific actions and to achieve the total reductions needed to attain the air quality standard in a region.

The total reductions come from ongoing implementation of the existing control programs, plus further emission reductions from new emission reduction measures. These reductions can be achieved through regulations as well as incentive programs.

Once adopted and SIP implementation begins, staff tracks the status of proposed rules, adopted regulations, and reductions from incentive programs to document that the state is meeting its SIP commitment.

Today's report is part of the SIP tracking effort for the San Joaquin Valley.

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MANAGER SUTKUS: In 2008, ARB made a SIP commitment for emission reductions in the San Joaquin Valley as part of the SIP for the annual PM2.5 standard in

2014. Today's report identifies emission reductions that have been achieved through the Carl Moyer and Proposition 1B incentive programs in the 2014 calendar year as part of meeting that commitment.

For each type of incentive project, the report details how the Moyer and Proposition 1B guidelines meet the U.S. EPA approval requirements for reductions being enforceable, quantifiable, surplus, and permanent. These are the same criteria U.S. EPA uses when approving reductions achieved through regulations.

The report also identifies each specific project from which reductions in 2014 are achieved.

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MANAGER SUTKUS: The emission reductions documented in the report are from projects that achieve reductions throughout the entire 2014 calendar year. There are over 800 Carl Moyer projects and almost 1500 Proposition 1B projects, consisting of off-road mobile agricultural equipment, portable engines, and heavy-duty diesel trucks.

The emission reductions achieved from these projects are shown here in this table, representing 7.8 tons per day of NOx reductions and .2 tons per day of diesel PM2.5 reductions in 2014. Through this report, ARB is documenting that these projects provide SIP creditable

emission reductions.

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MANAGER SUTKUS: Staff, therefore, recommends that the Board approve the report and direct staff to submit it to U.S. EPA for inclusion in the SIP. That concludes my presentation.

Staff will be happy to answer any of your questions.

CHAIRPERSON NICHOLS: Any questions? We have one witness.

Cary Drake of U.S. EPA.

MR. DRAKE: Good morning, Chair Nichols and members of the Board.

On behalf of EPA, let me say thank you for letting us testify before you today. So we understand and I think the previous presentations really bear it out. We understand that not only is your Board a partner with EPA in setting stringent emission limits for engines and mobile sources, that in many ways it's a leader in that very same endeavor. And we also understand that you need those stringent emission standards because of the air quality challenges that you have here, particularly in the South Coast and San Joaquin Valley.

And we also understand that you've taken sometimes heroic I think measures through in-use rules,

for example, to accelerate the emission reductions. And also an amazing investment that your Board or that your staff just laid out to you in accelerating those emissions reductions that are needed.

And we also understand that you need credit for those State Implementation Plans, because we're getting to that point where we need those credit in order to meet federal Clean Air Act requirement.

So it's been a longstanding interpretation of EPA that economic incentive programs are creditable in the SIP, but that they have to be demonstrated to be quantifiable surplus, enforceable, and permanent as the staff just laid out.

We believe that it's important for the state to give us a rigorous evaluation of these criteria and to demonstrate that those criteria have been met. And that's what this report is intended to do.

So we've worked with your staff on this. We appreciate their hard work. We look forward to you submitting it to us and reviewing it and acting from there.

I'm here to answer any questions if you have any.

CHAIRPERSON NICHOLS: I don't think there are any questions here. Thank you so much. Appreciate your coming and participating.

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             We have a Resolutions Number 14-36. Do I have a
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   motion and a second?
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             BOARD MEMBER SHERRIFFS: Move the amended
 4
   regulation.
             BOARD MEMBER GIOIA: Second.
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             BOARD MEMBER EISENHUT:
                                     Second.
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             CHAIRPERSON NICHOLS: Let's do a voice vote.
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    That's good to do every once in a while.
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             BOARD CLERK JENSEN: Ms. Berg?
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             BOARD MEMBER BERG: Aye.
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             BOARD CLERK JENSEN: Mr. De La Torre?
             Mr. Eisenhut?
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             BOARD MEMBER EISENHUT: Aye.
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14
             BOARD CLERK JENSEN: Supervisor Gioia?
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             BOARD MEMBER GIOIA: Aye.
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             BOARD CLERK JENSEN: Mayor Mitchell?
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             BOARD MEMBER MITCHELL: Aye.
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             BOARD CLERK JENSEN: Mrs. Riordan?
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             BOARD MEMBER RIORDAN: Aye.
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             BOARD CLERK JENSEN: Supervisor Serna?
             BOARD MEMBER SERNA: Aye.
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             BOARD CLERK JENSEN: Dr. Sherriffs?
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23
             BOARD MEMBER SHERRIFFS: Yes.
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             BOARD CLERK JENSEN: Professor Sperling?
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             Chairman Nichols?
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1 CHAIRPERSON NICHOLS: Aye.

BOARD CLERK JENSEN: The motion passes.

CHAIRPERSON NICHOLS: Great. Thank you.

BOARD MEMBER SHERRIFFS: On behalf of the valley, thanks staff for their hard work on this moving it forward. You batted more than 400 on this one.

CHAIRPERSON NICHOLS: Good work. It's nice that it seems to simple. And it's really great that EPA has found a way over the years to legitimately credit things that don't come in the form of regulations that are easy to enforce.

BOARD MEMBER SHERRIFFS: The incentives are hugely important to making -- well, it works both ways. It's the regulations that make the incentives work, but also it's the incentives and how those are applied that make people more accepting and willing to work and come to the table with regulations.

CHAIRPERSON NICHOLS: And the fact you can actually quantify the reduction is obviously key. Great. All right.

Our last item before we break for an executive session, which will be short, is a continuation of our discussion from prior Board meetings regarding the process for updating the SB 375 targets. The issue has generated a lot of interest from numerous participants around the

state. The Scoping Plan update under AB 32 reiterated that greenhouse gas emission reductions are needed from the transportation sector, including changes to land use as well changes in technology.

Passenger vehicle emissions proposed about one-quarter of the total greenhouse gas emissions in California. For this reason, SB 375 is one of the key strategies mentioned in this Scoping Plan for meeting our climate objectives.

Today, staff will provide recommendations for how we will update the targets. And this has come out of discussions with a spectrum of stakeholders over the last year.

While today's informational item does not involve any formal request for Board action or decision on revising the greenhouse gas emissions reductions targets, I expect that the Board members will be sharing with staff their ideas, thoughts, and guidance on how to proceed.

Mr. Corey, would you please introduce this item?

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

In 2010, the Board adopted per capita greenhouse gas emission reduction targets for the 18 NPOs in California pursuant to SB 375.

The first round of regional transportation plans

and sustainable community strategies prepared pursuant to SB 375 is nearly complete. And the second round is already underway in certain regions. ARB's role in implementing 375 includes reviewing the greenhouse gas determinations prepared by the MPOs and setting and revising the GHG emission reduction targets that apply to each of the MPOs.

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375 requires ARB to update the GHG emission reduction targets every eight years, but the Board can revise them of four years to reflect changes that may effect the targets. When ARB adopted the targets in 2010, you asked staff to come back in four years to discuss updating targets.

In January 2014, staff briefed you on the status of implementation of the program and some thoughts on the process for the next target update. Since the January briefing, we've had numerous discussions with MPOs, stakeholders, and the public to gather input on process to update the targets.

Staff will present recommendations to you today that include continued outreach to the MPOs and regular communication with stakeholders over the next year as we develop recommended regulations from new targets.

And with that, Terry Roberts will give the staff presentation. Terry.

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

MANAGER ROBERTS: Thank you, Mr. Corey.

Good morning, Chairman Nichols and members of the Board.

This is an informational briefing to present staff's proposed approach to updating the SB 375 greenhouse gas emission reduction targets for the MPO regions of California.

When the Board established the original targets in 2010, you directed staff to provide an update in four years to review the progress of target implementation and the need for updating the targets. Early this year, the Board provided further direction by asking staff to engage in public outreach with stakeholders before recommending on approach for updating the targets.

This briefing presents the results of our stakeholder outreach, a proposed time line and process for updating targets, and a description of related work that staff will undertake over the next two years.

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MANAGER ROBERTS: SB 375 implementation involves several things. It means ARB establishing and updating the targets. It means MPOs adopting regional plans that show how the targets could be achieved.

Most importantly, it means local actions to implement the regional plans so that they are more than just policy statements, but rather action-oriented plans that result in real greenhouse gas reductions.

The first group of adopted sustainable community strategies, or SCSs, demonstrates a commitment to more sustainable planning. The success of the target update and new planning rests on implementing the current plans so that the regions can meet their 2020 targets and establish the foundation for meeting their 2035 targets. Our priority now should be on the SCS implementation.

The SB 375 program has resulted in many positive changes in the way that California plans for the future. It has created a framework for better planning and decision making. Implementing the current plans is expected to result in many positive changes in our communities beyond greenhouse gas reductions, such as: Improved public health through active transportation, more ability choices that reduce reliance on the single occupant vehicle; more coordinated land use planning; lower costs for transportation, utility infrastructure and energy; and conservation of natural resources for a more compact development patterns.

These benefits have generated broad support for the plans among residents, local governments, the business

community, health professionals, and environmental organizations.

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MANAGER ROBERTS: With the heightened awareness of co-benefits associated with SCSs, there is growing interest in developing methods to measure or quantify those co-benefits. MPOs have developed a variety of performance measures to evaluate the benefits and to monitor the performance of their plans. Some of these performance measures include improvements in public health, increasing the amount of open space and ag land conserved, increasing economic and job growth, and reducing infrastructure costs.

The ability of MPOs to develop and use robust performance measures is often limited by the availability of tools and data to quantify these co-benefits and measure change over time.

For example, while new tools are being developed and tested to quantify the public health and other co-benefits of an SCS, there are currently no widely available and universally accepted tools for this purpose. Additional work is necessary to develop better methods that can be made available for use by MPOs and local governments.

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MANAGER ROBERTS: We are seeing SCSs that reflect more integrated planning with more sustainable land use strategies supported by a program of transportation investment that can result in lower per capita greenhouse gas emissions. A few examples of notable land use strategies include focused growth in priority development areas in the Bay Area, focused infill development in high quality transit areas in southern California, mapping of potential infill locations in the San Diego region's smart growth concept map, and the Sacramento region's focus on compact mixed use supported by high frequency transit. In virtually every SCS, we see the policy of encouraging more compact growth in existing urbanized areas.

Similarly, the SCS reflect common transportation strategies that support a move towards more compact urban infill. These include policies to accelerate and expand investments in public transit, including bus, bus rapid transit, and light rail services.

Every region has made commitments to active transportation as a component of the transportation system, with increased planning and dedication of funding for pedestrian and bicycle infrastructure. Where appropriate, MPOs have made commitments to develop the local infrastructure necessary to meet and surpass statewide goals for the purchase and use of advanced

technology vehicles.

MANAGER ROBERTS: The commitment to plan must be accompanied by a commitment to implement those plans if emission reductions are to be realized. MPOs are taking steps to implement their first SCSs. However, implementation of these SCSs is dependant on available resources for planning and project development.

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The regional transportation plans of which the SCS is an integral component are financially constrained. By law, the RTP must include a financial component that is based on reasonably foreseeable funding to cover the cost of projects included in the plans.

All MPOs have identified funding needs to implement their plans and recognize that the financial resources for local SCS implementation are severely limited. It is critical that funding be available in sufficient amounts to support SCS implementation at both the regional and local levels.

Investments need to be made now if we expect regions to meet their 2020 targets and stay on course to reach their 2035 goals. This fiscal year, the Strategic Growth Council plans to allocate \$130 million in cap and trade proceeds through its Affordable Housing and Sustainable Communities Program. The SGC's grant

guidelines are under development and will be finalized in December, after which the SGC plans to solicit grant applications and award the funds by June 30 of next year.

The draft grant guidelines focus on providing financial assistance for the development and revitalization of affordable housing, mixed use projects, and related infrastructure, consistent with the regional SCSs.

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MANAGER ROBERTS: The next few slides will outline staff's proposal for a time line and process for updating the targets based on public and stakeholder input.

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MANAGER ROBERTS: In April, ARB staff convened a stakeholder round table meeting to solicit input on an approach to the target update. We released a preliminary draft staff report in August that identified a range of issues to be considered.

In September, staff convened a second round table meeting and held four public workshops to discuss the issues identified in the August staff report. Several key themes have emerged from these discussions.

The first of these is that ARB's focus should be on updating the 2035 targets while continuing to support

MPOs to meet their current 2020 targets. There is also broad agreement that MPOs should have the opportunity to provide target recommendations to ARB based on scenario development and other technical data and analysis.

This is consistent with the statutory requirement for ARB to engage in the consultative process with MPOs and others before updating the targets.

Finally, there is support for continuing efforts to develop tools and other methods of estimating the co-benefits of regional plans, particularly in the area of public health. All of these themes, as well as staff's recommended approach, are reflected in the staff report that ARB staff released on October 15.

In the next few slides, I will present the proposed schedule for updating the targets. The 18 MPO oxidation can be placed in three groups which for policy and technical reasons should be addressed separately. The following time line and process take into consideration our focus on SCS implementation together with the recognition that MPOs have staggered, not concurrent, schedules for plan updates.

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MANAGER ROBERTS: The four largest MPOs, SANDAG, SCAG, SACOG, and MTC are the four largest regions of the state representing the majority of the state's population

and vehicular emissions.

In 2010, these MPOs provided target recommendations based on alternative scenario analyses that demonstrated feasible emission reductions based on a suite of SCS strategies.

For the target update, staff envisions a similar process of working with these MPOs during 2015 on the necessary scenario analyses and quantification of cobenefits underpinning their new target recommendations.

Staff would return to the Board in the late 2015 with recommended targets for these MPOs. Because their next SCSs are already in various stages of development, their updated targets should be made effective for their third SCSs that would be adopted starting in 2019.

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MANAGER ROBERTS: The current placeholder targets for the eight San Joaquin Valley MPOs were established shortly after these MPOs had adopted their 2010 RTPs.

These targets were intended to be revised once transportation modeling improvements were completed and alternative scenario analyses could be provided.

Those model improvements were completed in 2013 and used in their recent scenario analysis and SCS planning. ARB staff will evaluate the first SCSs from the valley and continue to look into the effect of SCS

strategies and inter-regional travel over the next year or so.

The process should provide help us to more accurately quantify the emission reductions achievable by their first SCSs. Staff would return to the Board in 2016 with recommended targets for these eight MPOs to use in their next SCSs slated for adoption in 2018.

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MANAGER ROBERTS: The modest targets for six smaller MPOs were largely based on the greenhouse gas emission reductions expected from their RTPs in place at the time of the initial target setting. For some, their targets are zero. And in one case, the target is actually an increase in per capita emissions.

However, their first SCSs are demonstrating much better performance than the targets demanded. By early 2015, all six of these MPOs will have adopted an SCS and the performance of their SCSs will help inform updated targets.

Targets for the six smaller MPOs would be updated based on greenhouse gas emissions, strategies adopted, or reductions projected in their first SCSs.

ARB staff would consult with the MPOs regarding any changes in modeling tools, methodology, or assumptions before recommending updated targets. This is something we

would do with other MPOs, as appropriate.

For the six smaller MPOs, staff would return to you in late 2015 with recommended targets, which would apply to their second SCSs scheduled for adoption beginning in late 2016.

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MANAGER ROBERTS: This table is simply a summary of the update schedule that I just described for the three different groups of MPOs. Staff would return to the Board in 2015 with recommended target updates for the four largest MPOs and also for the six smaller MPOs. Staff would return to you in 2016 with target recommendations for the eight San Joaquin Valley MPOs. And this table just reminds you about the year in which those updated targets would apply.

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MANAGER ROBERTS: Public discussion among MPOs, stakeholders, modeling experts, and state agency partners have been important to making progress on complex issues. Several topics have been identified by ARB staff and stakeholders as important for discussion and collaboration over the course of the next two years as targeted are being updated.

These include: Identifying better tools and methods to account for inter-regional travel and explore

methodologies that could be used for future SCS development; working with MPOs to establish more consistency in the factors used to develop key assumptions, including auto operating costs and socio economic forecasts, which are fundamental inputs to their regional travel models.

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We would MPOs to increase consistency in their model validation and peer review processes and develop a more standardized set of Sensitivity tests that MPOs would conduct for purposes of ARB's technical evaluations.

We would also want to strike the appropriate balance between encouraging innovative technology measures as a means of achieving emission reductions, and emphasizing the importance of land use and transportation strategies in an SCS.

We would also facilitate a discussion of best practices and lessons learned for SCS development and implementation, ranging from procedural practices such as public participation strategies to the use of innovative land use and transportation strategies.

We would also encourage the development and use of tools that would enable MPOs to quantify or estimate the co-benefits of sustainable community strategies.

ARB staff will continue to periodically facilitate discussions on these focused topics with MPOs,

stakeholders, appropriate state agencies, and the public. To maximize the effectiveness of these discussions, staff will invite appropriate technical experts who can contribute to greater understanding of the issues. And staff intends to ensure representation from large and small MPOs.

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MANAGER ROBERTS: In closing, our focus should be on SCS implementation to ensure that the extensive planning work done so far results in real emission reductions.

MPOs and local governments need sufficient resources to invest in planning and project development as early as possible to enable the regions to achieve their 2020 targets and put them on the path to achieve their 2035 targets.

The consultative process used for initial target setting was useful to demonstrate the range of possible CSC strategies and potential emission reductions possible from those strategies. Staff will work with MPOs throughout 2015 to encourage innovative approaches to the development and testing of scenarios and strategies and to maximize potential emission reductions and co-benefits of future SCSs.

Recommended targets will be presented to the

Board for these three groups of MPOs in 2015 and '16 for your consideration and adoption.

ARB staff will work with MPOs to ensure that recommended targets reflect a sustained effort to reduce greenhouse gas emissions and that emission reductions continue to grow over time through 2035 and beyond.

Thank you. That concludes staff's presentation. I'm happy to answer any questions.

CHAIRPERSON NICHOLS: Questions before we go ahead.

BOARD MEMBER GIOIA: A question. I'll hold my comments until later.

Having been involved in the Bay Area SCS with the timing, I wanted to be clear. The chart that shows -- this will help me in my comments later on when I listen to the speakers. I guess it's timing updates, slide 11.

So just to help, the second SCS is due different dates for different regions or all the same? So explain the dates they're due. I think it's 2017 in the Bay Area, the climate option deadline. So just to be clear, because that effects our timing here. The four largest MPOs, are they all 2017? Could you just tell us when they are?

MANAGER ROBERTS: For the four largest MPOs, they go in order for -- I'll just stick them in chronological order. There's four large MPOs.

SANDAG adopted their first SCS in 2011. Their second one would be in early 2015, and their third SCS would be adopted in early 2019.

If you take SCAG and SACOG, they're about the same schedule. Their first SCS was adopted in 2012. Their second SCS would be adopted in 2016. And the third one would be adopted in 2020.

For MTC, the Bay Area, their first RTP SCS was adopted in July of 2013. The second one would be adopted about midyear 2017. And the third one would be adopted in 2021. That's assuming they're follow for the update.

BOARD MEMBER GIOIA: Is there a pattern on the San Joaquin? Are they all about the same?

MANAGER ROBERTS: For the San Joaquin Valley, they all adopt in the same year -- maybe different months, but all the same year.

BOARD MEMBER GIOIA: What were the years?

MANAGER ROBERTS: It was 2014, this year. Their second SCS will be adopted in 2018. And their third SCS will be adopted in 2022.

BOARD MEMBER GIOIA: Okay. And the six smaller ones are all the same years?

MANAGER ROBERTS: They're not all the same.

CHAIRPERSON NICHOLS: Okay. This helps me

25 understand. For some reason, I thought all of the were

1 was 2017. But this helps frame this a little bit. 2 Thanks.

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CHAIRPERSON NICHOLS: We have 16 witnesses who have signed up, beginning with Mike McKeever, followed by Ahron Hakimi, Kern COG.

MR. MC KEEVER: Thank you very much, Chair Nichols, members of the Board.

I think you're going to hear mainly common ground amongst the diverse MPOs that are here today, but I want to be clear that my remarks are for sure related to the four largest MPOs. I don't want to inadvertently say something someone doesn't agree with.

We're very appreciative of the staff recommendations in terms of the approach to both the second round and the third round targets. It's a good example of the great working relationship we've been able to form or you've been able to form with us at your Board level and your staff level.

It is really critical to us that we have the elbow room to focus on implementation. We hear you see that's good news. You actually do want these plans implemented and the benefits to the plan delivered. We think this approach gets us there.

We are also supportive of the notion -- very supportive of the motion of starting the update to the

third round early. And the question about the timing gets you into complicated issues. I do, unfortunately, need to just tell you that there are some practical issues associated with the timing. I don't want to take time today to go into them. We would very much like to get with your staff and roll up our sleeves and work for solutions to that.

The big four are so concerned about the timing issue that we are strongly thinking of using this is an impetus to go to the federal government for permission to get all of ours on the same time frame. And there may be MPOs in the state that want to do that, too. So that's the nature of the discussion that we want to have.

We also understand, I will say on the record, that the unstated context of that early start is that the third round in, what meeting the ambitiously achievable target may mean may very well be a harder target to meet than it did in round one. And we get that and we're where we trust you to work with us to see if there are feasible ways to do even better.

I do would like to make a couple of related comments, Chair Nichols, if I could related to the ongoing cap and trade issue, because I do think it relates. We have for a long time been hoping that the cap and trade money would help us to implement the plan and even deliver

savings beyond what are in our first round plans.

Unfortunately, I'm not particularly optimistic given the state of the draft guidelines for the 20 percent of those funds that relate to the affordable housing sustainable communities strategy that we are going to get there.

The 375 is a great example of at least one version of the healthy partnership between roles of states, regions, and local governments where the state sets a very clear performance standard. The regions and their cities and counties have virtually complete flexibility to figure out how to meet that standard given the realities of our local regions and then --

CHAIRPERSON NICHOLS: Go ahead. I'll let you finish up.

MR. MC KEEVER: I'll try to be quick. I do have a couple points I would sure appreciate time to make.

And then you with your technical staff and ultimately your Board have the capacity to hold us accountable for whether our unique ways of meeting that clear performance standard are real or whether we're fudging the numbers or not doing it well enough. That is working. That model is working. And we are together very much in a race to the top situation where we're getting better and better at delivering benefits to the planet.

I'm really worried at this point that the cap and trade at least in year one is the reverse of that. There were more silos in the statute than we had hoped for. But they're workable.

What's happening in the draft guidelines is more and more silos are being created and categories beyond what are required by the statute. And they're serving many totally legitimate public policy interests. But every new category that's created and new quota about X percent of the money has to be spent here and here reduces the power of the greenhouse gas emission reduction imperative, which is the only point of cap and trade, which is to take a very substantial sum of money, we hope, and deliver the very most savings for the state that is possible through that pot of money. Ad we don't think the track it's currently on is serving that interest.

We are concerned that a lot of knowledge and staff capability that exists throughout the state in the 18 MPOs and in the rural counties is not looked on as a resource that will be beneficial and help the state to accomplish that. And we're concerned that the prescriptive standards are so tight that it's even going to limit how many proposals you get, let alone encourage the most innovative, creative, and productive proposals to come in the door. So we are working on that. It's not

done.

The one idea I want to close with is that in addition to this process the SGC is running, you, of course, have a major role in the greenhouse gas determination of what the benefits of the projects are. And in addition to the work we're doing on the SGC side, we would offer to you that we can take our good partnership that's been created under SB 375 and work with you just on those technical computations to document what the savings are. And we have very smart modelers who know these regional plans, who will know where the high impact leverage points are that help to get this to a strategic level and a maximum bang for the buck level. And there is no need to go into details here. But that's just a concept, Chair Nichols and others, that I would like to --we would like to explore with you.

CHAIRPERSON NICHOLS: Thank you.

BOARD MEMBER GIOIA: I have a quick question.

So one of the issues that came up in the Bay Area in the presentation that we received from the Strategic Growth Council and the guidelines came out is that the Council of Governments or the MPOs themselves were not eligible to apply for the SCS funding -- cap and trade SCS funding. And there was an open question of whether the local air district could apply. The belief was they may

be able to.

So I would be interested to hear when the COG folks come up, just their thoughts on that. Cities and counties can apply. And there was this discussion that the cities and counties sort of in conjunction with some blessing from the COG, but that's unclear. Because my original thought was maybe the COGs were going to be eligible or the MPO. But that appears not to be the case.

So it would be interesting to hear briefly each of their thoughts on that, because that's a key issue about how the money is spent. I don't know if there has been a final determination whether the local air districts are eligible to apply. I don't know if our staff or legal staff -- but whether we understand whether they can or if there is any new information on that.

MR. MC KEEVER: I'm going to let others in our team respond to that.

CHAIRPERSON NICHOLS: Yes. We'll hear I'm sure from the other MPO directors. Thank you.

Staff, do you have any comment on the eligibility issue? We've been looking at these guidelines to the extent they are written in a language one can read.

BOARD MEMBER GIOIA: Whether local air districts are eligible to apply.

MANAGER ROBERTS: I have looked at the draft

guidelines. They're not final yet. The emphasis is on construction of residential projects and other infrastructure. So the emphasis for eligible applicants is local governments. And I do not recall seeing air districts in the list of eligible applicants.

BOARD MEMBER GIOIA: It was an open question about that. But so we need to get that.

CHAIRPERSON NICHOLS: They're still in draft form so comments can be submitted.

MR. MC KEEVER: As I leave, a final thought is one way to fix -- the sum of the really are the impression of the calendar and the fact this program is scheduled to be rolled out in a blink of an eyelash. And if there was any way to combine the first and second founding rounds into a consolidated round and buy another six month's time, I think a lot of good would come from that. I do understand that that has been considered and not supported today. But this is really important. And so it may be a hail Mary pass, but sometimes a hail Mary pass works, Chairman Nichols.

MR. HAKIMI: Good morning. I'm Ahron Hakimi, the Executive Director of the Kern Counsel of Governments and also the Chairman of the San Joaquin Valley MPO Directors.

Madam Chair and Board members, thank you and your staff for all the work with Kern and the other San Joaquin

Valley MPOs in their review and development of the SCSs and all the work over the last 20 years that have resulted in huge improvements in the air quality in the San Joaquin Valley. We look forward to a continued partnership.

The San Joaquin Valley Policy Counsel, a

Committee consisting of two local elected officials from
each MPO region, voted unanimously to recommend any 375

target update not be implemented until the third round of
SCS development. This action recognizes the need for the
second round of SCS development to focus on implementation
of the ambitious strategies contained in the first round
SCSs.

Those SCSs reflect ambitious new strategies that require collaboration with the cities, counties, and transit operators within each MPO region to successfully implement. Without implementation of the strategies within the SCSs, no additional greenhouse gas reductions will occur from SB 375 planning efforts. As an example, Kern received over \$8 million from bike and ped projects during the first year of implementation of the CTC's new ATP program. \$8 million represents 20 percent of the funds we projected to receive over 26 years. This is great news.

We have embraced the new ATP program by submitting quality applications for reserving projects in

mostly disadvantaged areas. These projects, as you know, take years to develop as most infrastructure projects do.

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Give us time to build these types of projects and time for our residents to use the project before setting and implementing new targets. Davis did not become a bike-friendly city in five, six, or eight years. It has taken decades.

We are on the cusp of a technological break through that will radically shift our investments in the San Joaquin Valley in conventional transit. I believe that Professor Sperling is correct in his statements at prior meetings that smart-phone based ride sharing or car service aps may fundamentally alter how people move in our communities over the next decade. Please give us time to see how this plays out before we come back to you with a plan that proposes more investment in possibly outdated technology.

And finally, the first round of SCS development was a learning process statewide. Please give us the same consideration that you give the four largest MPOs and the targets should not take effect in central San Joaquin Valley until our third round, which would be 2018.

Thank you, Madam Chair.

CHAIRPERSON NICHOLS: Thank you.

Next is Andrew Chesley.

MR. CHESLEY: Thank you, Chair Nichols, members of the Board.

I, too, would like to offer my thanks to your staff and to this Board. This Board has been a particular support to all of us in terms of recognizing the need in terms of implementation of investment in tools and strategies and methodologies that can bring about -- improve that work from.

We want to thank you for the investment that you have made in MPOs and particularly in the San Joaquin Valley.

But this is only the beginning. One of my partners in the San Joaquin Valley, we urge support the Board to look at the implementation of our SCSs and to stay the course similar to the four largest MPOs and recommend that the update targets occur in the third round of the regional transportation plans for the RTP and SCSs that come forward from the San Joaquin Valley.

We think it's appropriate, especially when we talk about the smallest MPOs in the state, the MPOs with the least amount of resources, and MPOs that went through first round and had some of the greatest challenges in terms of the experience in doing so through the methodology that has been adopted, the tools we had in place, the data that was available to us. We believe the

following same pattern as the four largest MPOs makes sense.

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I support the comments made by Mr. McKeever in terms of that third round, making sure we're thinking about it as early as possible in terms of moving forward with target development to levels like, but looking very specifically to the third round.

I want to assure you that in the San Joaquin
Valley we are breaking a sweat. I can speak on behalf of
the San Joaquin Council of Governments in Stockton. Three
northern valley counties are set to coordinate a joint
target and cooperate in the development of a group
possible under SCS strategies for the next round of the
RTP. That has been discussed at each of our MPOs.

We have agreed with the Metropolitan

Transportation Commission to adopt similar assumptions to directly address the inter-regional issues and travel between our two regions.

We have moved forward to supplement the state's active transportation funding with 150 percent increase over that using our regional dollars to match that and to take steps right off the bat in terms of implementing our SCS strategies.

And when it comes to land use planning, the Stockton General Plan is in the process of being updated,

in large part because of scenarios that was developed as part of the SCS. Stockton is looking now forward to pulling back on some of the boundaries in their general plan, looking to go up and maybe not as large as that plan originally is as a way to address the SCS.

I encourage you to continue to work with us in terms of the implementation on this. That is the key component of the next round, that experience in implementing the adopted SCSs by the MPOs. Thank you.

CHAIRPERSON NICHOLS: Mr. Stoll.

MR. STOLL: Thank you. I'm Charles Stoll and most people know me as Moggs Stoll, the Planning Director from the SANDAG. And we have had the distinct pleasure to go first in the SB 375 regional plans. And we will have the distinct pleasure to be first on the second round of those plans in the fall of 2015, just barely a year away.

I'm here on behalf of Larry, our Executive

Director. Our Board meeting happens to be this morning,
so he couldn't be here.

We definitely appreciate the support we've gotten from the Air Resources Board and the staff. We've worked very closely together on both the original -- the first plan under SB 375 and now that the first got in the second round. We agree with the targets being looked at and applied to the third round because frankly it's too late

for us to get target set. We're well on our way. We're less than a year away from approving our second plan. So if targets were to be set tomorrow, it would be too late for us to really implement them into our plan to begin with.

I want to reiterate what you've heard here already about the importance of focusing on implementation and the funds needed for that implementation. We feel that we certainly agree with that in San Diego. From our perspective, there is a lot of consensus on our plan that we have that our horizon year is 2050. And the plan itself includes transit components, active transportation components, technology components, all of those. There is a lot of consensus. Where we hear frustration is how long it's going to take to get there. Our plan goes out to 2050. And we're getting a lot of pressure, why can't you bring these great projects forward. And the fact of the matter is the process is required to be fiscally constrained. And there are fiscal realities.

In our region, we are committed to exploring yet another regional funding source. We already have a half-cent sales tax measure that goes out to 2048. We're committed to look for more than that. We really need to focus in our region and I think throughout the state on the importance of operations for transit. Sometimes it's

easy to find the capital dollars to build a transit facility, very difficult to find a sustainable source to operate it. So that's important.

And when the discussion before was about the ability for MPOs to apply for cap and trade funding, we build projects at SANDAG. We build all of the transit projects in the region. Our Board has made a \$200 million commitment the first ten years to build out our active transportation projects. So that's a very important issue to us.

I just want to end with we also very much support the ideas that were put forth by Mr. McKeever. And thank you very much for the opportunity.

CHAIRPERSON NICHOLS: Thank you.

Rebecca Long, followed by Heather Adamson.

MS. LONG: Good morning, Chair Nichols, members of the Board. Rebecca Long with the Metropolitan Transportation Commission here on behalf of Steve Hemminger, who is out of the country right now.

I, too, would like to thank the staff for their very thoughtful presentation. We are very much in support of the recommendation as far as starting on the targets in 2015 and then having those be effective in 2019 for the big four MPOs.

We think it's great that the staff have really

emphasized implementation. That is key. This is largely a planning exercise that we're doing in the SCS. But what really matters is implementing these improvements and achieving the greenhouse gas reductions.

And along those lines, I would just mention, you know, we talked in the presentation about the regional transportation plans being financially constrained. And they are, which sort of then asks the question why are we talking about necessary funding? Well, within that financial constraint, there is still assumed new money. In fact, MTC assumed hundreds of millions, if not billions, when you take the entire 25-year time frame of the SCS and cap and trade funding, as well as other new revenue sources. So to realize the targets in our SCS, we need to attain that new funding.

So just looking at what the Legislature has thankfully done with cap and trade funding and this new program, it is a great opportunity. And I would like to align our comments very much with those articulated by Mike McKeever. We are very concerned about the draft guidelines. We think they kind of tie the program up in knots. And we'd really like to see some support from you all in expressing the importance that this program was designed to be an SCS implementation tool. So above all, that's really what it should be targeted towards is

achieving the implementation of these plans at the regional level.

So that's really the emphasis I wanted to provide today. And just thank you very much.

BOARD MEMBER GIOIA: I had a question. So I know there was a lot of discussion when we adopted the plan in 2013 sort of collective Bay Area plan about the estimate for cap and trade revenues that was incorporated. And I know a lot of folks, including myself, thought that was maybe a bit too generous of an assumption.

So you raise an interesting point which may be applicable obviously to all the plans is that the assumptions of reaching the goal are linked to a certain assumption about how much cap and trade revenue would be received. I'm not sure if every plan is similar. It may not be -- every plan may not be similar. But if those plans that are, that's an important factor to understand or there needs to be another source of revenue to build out the projects or the environmental strategies that are needed.

So this isn't the first time I heard that linkage mentioned about the goals and the assumptions. And I don't know from the staff, did some of the -- all of the SCS plans rely on a certain amount of cap and trade funding? Because I think that was somewhat controversial,

the dollar amount that was put in this for the Bay Area.

And can you tell us, did all of them rely on sort of an assumption on a certain amount of cap and trade funding?

MS. LONG: Not all of them relied on cap and trade funding. I cannot tell you how many did rely on it.

BOARD MEMBER GIOIA: I'm just thinking what that means as we think this through. I don't have an answer. But I just want to draw attention to that.

CHAIRPERSON NICHOLS: Thank you.

Heather.

MS. ADAMSON: Good morning. My name is Heather Adamson. I'm the Planning Director for the Association of Monterey Bay Area Governments, or AMBAG. We are one of the six smaller MPOs in the state. I'm here representing Mora Tumi, our Executive Director, who had a conflict today.

And I can understand the need to update the targets as we move forward with developing future SCSs.

While as a smaller MPO with very limited resources we would have preferred to wait until the third round of SCSs like the rest of the state so we can focus on implementation, we can't accept ARB staffs recommendation to update to our targets the second round SCSs. However, we encourage ARB to maintain flexibility in the target-setting process.

Ongoing collaboration with all of the MPOs is critical during this target-setting process. And we appreciate that ARB is willing to add a representative from the smaller six MPOs to participate in the roundtable stakeholder meetings moving forward.

As I mentioned, this is one of the smaller regions without any self-help funding. We have very limited resources to implement the types of projects and programs that provide GHG reductions.

Absent these resources, it is hard for us to meet our sustainability goals. We encourage the ARB Board and other State agencies to provide funding to the regions to help us implement our SCS and to provide the GHG reductions mandated in SB 375. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. IKHRATA: Good morning, Chairman Nichols,
Board members. Welcome to the SCAG region. Thank you for
allowing me to speak for a few minutes. Couple things.

One thing is I agree with everything that Dean said, my brother, Mike McKeever. I second everything he said.

I also want to thank you specifically, Chair Nichols, for hearing our voice. You didn't have to, but you did.

We, at least the four large MPOs, work together

very hard with the lot of resources to develop plans that actually mean something, that hopefully one day this will be real. And we actually do have a lot of good stories to tell about how this plan are moving. In the last three months in the SCAG region, over \$200 million from the Transportation Commission and from the regional program that SCAG is in has been allocated for projects -- for active transportation projects. SCAG put about 25 million of its own money to give planning guide to cities and counties to move SCS forward. We happy with that.

One thing I want to emphasize and my Commission, the cap and trade is an opportunity to tell regions to work with cities. These plans are real. And it is important to remember that cap and trade should be directed to our reduction of greenhouse gas emissions.

I'm very concerned, like my colleagues, to get the date right. And I think people are watching to see how we move this funding and watching the process itself.

One thing I appreciate about you and the Air Resources Board and your staff is we partner. We actually have a meaningful partnership to put together the plans.

And I would -- my advise to the State agencies in charge of this is to reach out to partners. While the staff has said we should coordinate, coordination could mean a lot of things. I would argue that it is to the

best of the plans to have regional and state coordination moving forward these funds. And right now, the silos and the kind of things that these guidelines go into is troublesome actually.

We are, as you know, going to move this plan as many of you said before with this determination. We're not only relying on fixed guide ways. We're not only relying on technology. We're not only relying on the capacity, but we're relying on a mix of things to move the plans forward. And we look for partnership. And at the end of the day, the state is in charge and we respect that. But we would like to have a true partnership to move this forward. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Carlos Yamzon.

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

Carlos Yamzon, Executive Director for the Stanishuas Council of Governments, one of the MPOs in the San Joaquin Valley.

I don't want to belabor this, but many thanks to the ARB staff and to the Board for consideration of the valley in this matter.

I think over the last two years has been a real learning process for us in the trenches. Did I say

trenches? I'm sorry, the valley. It's the philosophy of intent versus the political and technical. There are some key differences there. Those are the challenges that we have in the valley, merging the political and technical.

I think a point was brought up by the staff in presenting the time lines and having consideration of different time lines because of policy and technical matters. So they're real.

Locally, I think what we have learned is things like health, transportation, and land use are almost hiding in plain sight when you're trying to get that out to the population that's most effective and probably the least interested in the work we're doing here.

But I think in doing that and engaging that health industry, we've learned a lot of lessons. And I appreciate the workshop that Professor Sperling actually had with us and taking things along with that, particularly in relation to health.

And it's almost like as you learn as you go, we just got through adopting our SCS. And you almost want to start all over again because there are new things that come about that we get so excited about. I want my staff to update the RTP SCS on Monday, not necessarily in anticipation of the new targets, but because we just had such a good time doing it.

But if you've read your USA Today, that was probably left or not left in front of your door, Uber's one-shot deal. Related to Professor Sperling's comments regarding Uber. Uber is in the valley. It's in Modesto. They're actually using it to get the vaccine to people that can call and use the application. These are technologies that we're talking about. The bureaucracy and the government moves a little slower than technology. We have to catch up with this or get into the same time line. I think that's the challenges that we're facing. So we appreciate your consideration of updating the targets and recognizing the challenges that we have.

And that timer is distracting, but I'm going to stay on time.

But it's real and we accept that challenge. We appreciate all the work. And I think we have good intentions, as we all do. And I appreciate your time and your corporation. Thank you very much.

MR. HIGGINS: Good morning. I'm Bill Higgins, Executive Director of the California Association of Councils of Governments, which means I get to represent the little ones and the Center Valley and the big four and provide the unifying voice.

And I think when you got the presentation from our Executive Directors in January, you heard we're very

pleased about the progress of our plans. In fact, I've often said that our SCSs were more about community conversation change than climate change, because it engaged people in the discussion of co-benefits and the discussion of health in addition to GHG reduction.

But the plans and the mandate is to focus on GHG reductions, and we appreciate the focus on implementation in this report. And I want to pick up on where Supervisor Gioia made on the connection between funding and the ability to achieve targets. 375 is an input/output device. The more money you put in, the more that projects that will be in our fiscally constrained plans and the higher targets we can achieve.

You were aware of that I think when you set the targets because I have the phrase tattooed on my body in resolution that says that you committed to "identify, pursue, and secure additional funding sources for the successful implementation of SB 375." That's in the resolution. You can go read it.

And since that time, there's transportation funding has shrunk, redevelopment has gone away, and there is this new source of funding called cap and trade. And you heard some frustration about it. Cap and trade is going to do some very, very good things because it's going to award some specific projects. But if I'm a regional

transportation agency looking at achieving a higher target, I can't program a project -- I can't assume that a project is going to win an SGC grant five years from now to program that project.

If we're going to be successful, we need a set of funding that we can program so you can hold us to account on that and we can continue the good working relationship we have.

So when you hear our frustration on that particular issue, it's because we don't think it's the most effective means of funding in order to achieve the goal that you and we share, which is reducing GHGs by high targets. The last thing, because I did listen to everything Supervisor Gioia said, is the question about who's eligible in the guideline is public agencies, which are COGs and everything. But there is also co-applicants which could be any subdivision of the state which would include air districts.

BOARD MEMBER GIOIA: So you're saying that, for example, in the Bay Area Public Transportation Commission because it was discussed at a meeting, the Regional Joint Policy Committee meeting that MTC would not be eligible. Has MTC determined it is?

MR. HIGGINS: Actually, there needs to be a clarification in the language. It's in my list of

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    comments. It does say a Council of Governments is
    eligible to apply. I believe when they wrote that
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    language they were thinking that all MPOs to are COGs.
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    That's not the case. MTC is a regional transportation
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    planning agency.
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             BOARD MEMBER GIOIA:
                                  That would mean Association
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    of Bay Area Governments was eligible and their
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    understanding was they were not?
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             MR. HIGGINS: According to their language, they
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    are.
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             BOARD MEMBER GIOIA: The position of the COGs is
    the Council of Governments is eligible?
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             MR. HIGGINS: According to the words of the
    Strategic Growth Council, yes. And this isn't unusual for
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    COGs.
           I think you can go to SANDAG in the audience or
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    many of the other regional transportation planning
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    agencies that are also service providers or project --
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    they undertake projects. And they award themselves funds
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    through a competitive process with the process controls
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    because they're a part of the solution in their regions.
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    And that's what the local governments --
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             BOARD MEMBER GIOIA: That would make air
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    districts eligible.
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guidelines, it's not defined as a public agency?

MR. HIGGINS: Under air district in the current

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BOARD MEMBER GIOIA: I don't want to misquote it, but the Executive Director of the Strategic Growth Council the day after -- two days before the guidelines were released was making a presentation in the Bay Area. And I believe the representation was that it was like ABAG would not be eligible. You were at that, weren't you? No.

Maybe not. So anyway --

MR. HIGGINS: So to refocus, because I see the three right there, is we're interested in working with you on real long-term funding solutions so that we can identify, pursue, and secure additional funding sources.

CHAIRPERSON NICHOLS: Absolutely. Well, there are two elements to this. One is the current allocations, which we all know are just a start. And the second is the longer-term picture. We're interested in both.

Ms. Holmes-Gen.

MS. HOLMES-GEN: Good morning. Bonnie Holmes-Gen with the America Lung Association of California.

Really pleased to be here to be part of this discussion today. We care deeply about the SB 375 program and roll out. The Lung Association has been involved in the initial-target setting process, engaged in the regional processes, supported funding. We've been involved in developing our own research to try to pin down some of the health benefits as far as we can go with the

tools that we have.

We're excited about what has been accomplished. We see tremendous potential for increasing the health and air quality benefits through SB 375 and with our upcoming ozone deadline and the need to clarify our path to 2020 that the Board's plan to look at our mid-term goal setting. There is a lot of opportunity here I think to figure out what more can we get out of our 375 process and out of reducing traffic, reducing trips at the local level.

There's been a lot of early successes, but we think there is a lot more to do to ensure that SB 375 truly guides our land use and transportation decisions at the local level and reaches the potential.

Some key items that we see are needed to move forward and really meet this higher level. Clearly, setting robust targets for 2035. Going boldly into the next round of target setting is really important to continue to drive innovation, commitment, and investment at the local level.

We'd like to stand up for the schedule that's in the staff report. I heard some different opinions about it, but we think the schedule is a good start to look at seeing if we can set a higher level of targets for the valley for round two.

At this point, let's see what we can do if we have to go through this process of determining what has been done in the current plans. We have to understand where we are in terms of the current what can be achieved with the current plan. I understand that will contribute to understanding how far we can move forward.

We really -- aside from robust targets, critically important, we need to nail down this co-benefits analysis. We need your help. We know that information about reduced health costs is critically important. How can we work with you to finalize the tools, identify funding and resources needed, get us more assistance to local governments and NPOs in using those tools, help spread good information about best practices is another key effort.

We really want your leadership and direction in spreading important innovations, looking at project performance assessment, how well are our current investments aligned with our goals under SB 375.

Finally, funding, that's another huge area and we look forward to working with you on cap and trade. The bottom line is America Lung Association and health communities are strongly invested in moving forward to push the envelope in improving health benefits and air quality benefits throughout SB 375.

1 Look forward to working with you.

CHAIRPERSON NICHOLS: Okay. Thank you.

Is Joe Lyou here?

MR. LYOU: Hi, Chairman. Thank you for having me again, and members of the Board.

Joe Lyou with the Coalition for Clean Air. I think yesterday the message on the zero emission vehicle program to stay the course, the message today is business as usual isn't going to get us where we need to go.

And also picking up on a metaphor from yesterday, if all your programs are a turkey dinner, this one may be the mashed potatoes. It's a little squishy.

I think that the really encouraging thing is I hear consensus that prior to SB 375, we didn't -- we have planning agencies and local government officials really buying in and supporting the idea that they need to do something for the climate, for the environment to protect the planet. And that engagement didn't happen until we had SB 375. I think we had a consensus on that.

What worries me is that I see us going in different directions on whether there should be aggressive targets and obligations versus the argument that we don't have the funding. We can't move us forward. And that shouldn't be allowed to divide us.

I think that we should pursue a framework and a

process, a what if exercise, of if money wasn't the impediment, let's take a look at that. Now, you said the targets the way you have to through the statutory requirements of the financially constrained processes and all that. But if you do the what if exercise and you say, what if we had unlimited funding to do all the things we needed to do to reach our climate goals to attain our clean air standards, what would that look like?

And by that process, I think we can avoid the division, come together in consensus and get creative where we are going to find the funding sources. Quite honestly, I think we all recognize that the amount of money it's going to take goes way beyond what cap and trade can provide.

So I think we have to be honest about that. I think that in the end, we all recognize that the low hanging cranberries have been picked. We need to reach for the high ones and we need to do it together. Thank you.

CHAIRPERSON NICHOLS: Coming from the east coast myself, I'd like to comment that cranberries grow on low bushes. But other than that, your analysis is perfect.

Okay. Mr. Raya.

MR. RAYA: Good morning, Chair Nichols and members of the Board. I'm representing Climate Plan.

Climate Plan and its partners are pleased with much of the staff report and with want to thank you for your leadership and continued commitment to the following four issue areas.

First, analyzing NPO GHG targets to determine if they can actually achieve the AB 32 goals. And that they are actually on pace to meet these goals. This type of analysis can foster statewide dialog about what resources are needed to help with implementation.

Second, identifying and spreading best practices. The SCSs have inspired a lot of innovation in communities across California and any effort to spread these best practices between regions and communities would be valuable. So we're happy to see that in the staff report.

Third, quantifying co-benefits like health, affordability, job growth, and conservation will help communities achieve these goals because as we all have heard so often, what gets measured gets done. So we are really happy that that is also in the report.

And then finally, regarding the GHG reduction targets in SB 375, we recommend keeping the focus on land use strategies and measuring our progress toward these targets. Any reductions resulting from electric vehicle infrastructure or new technology should supplement, we believe, not supplant the land use targets.

Again, thank you for your leadership in this area and we look forward to working with you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Cazares.

MR. CEZARES: Good morning, everyone. Thank you for allowing me the time. My name is Fernando Cazares and I work for the Natural Resources Defense Counsel.

I recently moved back to L.A. after nine years of living in San Jose and Washington, DC, where I either walked, rode my bike, or rode a public bus or train to go to and from work or to go to numerous happy hours and networking events.

I sold my car when I moved to DC. When I looked at coming back to L.A, I thought about what are my options going to be? Am I going to have to buy a car?

The last four days, I've done public transit from San Fernando over the 405 to Santa Monica. I expected much worse. It's actually been not as bad as I thought. It's been tremendous improvement, though I believe there's much more improvement to be done.

I'm speaking to you today not only as a representative of NRDC but as a native Angelino and Southern California resident, and also an uncle of a nine and a seven year old who live in Bakersfield, California.

I strongly ask you to take the following steps to

strengthen 375. Please set the targets strong enough to meet the state goals. We know what we need to do to mitigate the impacts of climate change. I believe that we should set the goals accordingly. Please identify and share best practices among regions. You're in a quarterback position to be able to see best practices from different regions. So please take advantage of that role.

Please maintain the focus on reduced driving.

Use me as an example, if you will. Electric vehicles are valuable, and I'm looking at them honestly. But we need to find ways to reduce the need to drive to just about anything for daily activity. And we need to find ways to measures the co-benefits of reduced driving.

We cannot deviate from the critical intended impact of 375. We have to make specific and tangible land use and transportation policy improvements that will lead to significant reduction in vehicle miles traveled and sustainable development patterns.

You should only give credit to action-oriented strategies and projects rather than assumptions on fuel demographic or economic trends and their related effects on greenhouse gas emissions.

To close, we have an opportunity here in California not only to lead the nation in cutting greenhouse gas emissions and providing a model for the

nation, more equally important with 375 and AB 32 give us a chance to remake our communities and free our residence from gridlock on healthy air quality and toxic industrial land use while lacking economic potential to coordinate land use and improving our health.

To paraphrase a book by outgoing President

Francis Bernaky, SB 375 gives us an opportunity to -- SB

375 is about the California we create and leave behind for our children, grandchildren, nephews and nieces. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Moncayo.

MR. MONCAYO: Hi. How are you? My name is Jaime Moncayo with the Leadership Counsel for Justice and Accountability. We've been working closely with folks in Kern, Tulare, Fresno and Merced on the SCS process.

First of all, we'd like to thank the Board and the staff for the entire process. We appreciate your hard work and your willingness to collaborate with us.

When updating, my comments are focused specifically in the value because that's where we do most of our work. We would like to take into consideration a couple things when you work on those targets. Primarily that the initial targets were placeholders. Always keep that in mind.

Remember that a review of the methodologies that are being used would be much more helpful in understanding what the targets should be in the future. We'd like you to take into consideration that for some of these MPOs, it was relatively easy to meet the targets. Very few changes were required to what they were already doing, which is not the purpose of this law or process.

And also we would like that you would consider setting a very high standard so that the residents of these communities can benefit from the changes.

As was highlighted by the process throughout this time for several MPOs, we'd like you to please clarify or set stricter guidelines for assumptions in regards to travel models, auto operating costs, or socio economic forecasts. Again, we want the process to bring real benefits and actually require work that has been done and can be done.

Again, we also are very encouraged by the development of tools and models to assess co-benefits. We hope that with these new tools and models, we can see greater benefits to the communities throughout the region, especially disadvantaged communities so they can benefit from the SB 375 process.

Likewise, on the matter of implementation and resources, which I know have been a big topic here

tonight, we'd like you to know that we are willing to help locating and securing these resources, and that we hope you make it a big commitment on everybody's part to make sure that a lot of these resources are directed towards disadvantaged communities. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Christine Barker.

MS. BARKER: Good morning, everyone. My name is Christine Barker. I work with Fresno Metro Ministry.

Got up at 4:00 this morning to be with you all today. So thank you so much for taking the time and the effort to really implement SB 375.

The plan that the staff has outlined in the staff report, it's a really good step forward. And again, the MPOs have done a lot of work to get us as far as we have so far.

As an advocate, I've been working in Fresno with the Fresno SCS update process for the last two years. And I have been witness to the huge amount of learning that has taken place already and the amount of learning I have faith that we are going to continue to do together to really figure out how we can set targets and how we can make plans that improve the air quality in our region, which is desperately needed.

I moved back after college, and I got asthma as

an adult, which I didn't realize was possible until I came back to the valley. So we really need strong targets. We need to remember the initial ones were placeholders. The next round should have stronger targets for the valley.

We need to know what our benefits are. I think you've heard that already. We should be sharing what we're learning and making sure that the communication and the connection continues.

Again, in places like Fresno, we really need the help to focus on reducing driving and creating infrastructure to be able to have transportation options that don't exist currently like they do in bigger cities.

And we definitely appreciate that there is so much emphasis on addressing the technical issues and model assumptions and we want to make sure that that transparency continues and improves so we all know that we're all talking about the same thing. That will be great.

And just to close, the valley serious issues require serious consideration. And we need to promote stronger strategies to achieve emission reductions, greenhouse gas reductions through land use changes.

We have to change how we grow in the valley.

Thank you so much for all your time and effort and

leadership and have a good morning.

CHAIRPERSON NICHOLS: Thank you.

Mr. Imhof.

MR. IMHOF: Good morning. Peter Imhof from the Santa Barbara County Association of Governments.

As much as SBCAG supports reducing greenhouse gas emissions and understands the vital importance of doing so, revising the SB 375 targets right now will not help reduce greenhouse gas emissions or move the needle one iota. It's the implementation of adopted SCSs that will achieve greenhouse gas reductions.

A new target-setting process right now will require a huge expenditure, staff time and effort, both for NPOs and for ARB that could be better put to use for implementation.

We appreciate the staff report's acknowledgement of the need for material support and funding to allow SCS planning and implementation. However, that support has yet to be made concrete, even through cap and trade. If you do decide to initiate a new target process now, then we request that new targets take effect for small MPOs in 2018 consistent with the requirements of SB 375 and SBCAG's own update time frame so we're not hit with new targets exactly midway through our current planning cycle.

Finally, if you use projected reductions in the first adopted sustainable community strategies as the

basis for the updated targets, then your request that you build in some flexibility to account for technical issues, such as changes in modeling tools or methodologies that could result in changes to the projected reductions.

Thank you.

CHAIRPERSON NICHOLS: Thanks. That concludes the list of witnesses that I have. So it's back to the Board for some discussion.

Before we go too much further, I want to say a company many things. If you're here to give public comment on something other than this item, but just want to speak during the open comment period at the end, I would appreciate it if you would sign up with the clerk so we know how to plan for that.

Back to this item though, I really would like to say a couple things. First of all, the staff report really was good. Our staff reports are generally good.

But this is an excellent staff report I think in the sense that it lays out both technical and policy issues in a very clear and helpful way. And part of the evidence for that I think is the fact that we had such strong and positive input, not only from our partners but also from the community organizations who have been following this process most intently.

And I really want to congratulate all of the

groups that came here to present testimony this morning and to urge us on in various specific ways. I hope you realize that you have had an impact. And if any of the funders of your groups are listening to this broadcast, I hope they're hearing it, too, because we really have come a long way over the last couple years.

I do feel that we should explain a little bit about ARB's role in this funding issue. Not to be defensive, but just to be clear, we were involved in the preparation of the Governor's budget and the budget that the Governor submitted to the Legislature was substantially siloed I would say as a result of the process, because that's what tends to happen. And then as has been indicated, even beyond that, now that it's back with the various agencies, there were pressures to further came things up into small or different kinds of chunks.

We are not members. ARB is not a member of the Strategic Growth Council. We don't have any direct responsibility for the guidelines or for allocating the funds. We're a sister agency. But we do have an opportunity to have input.

And based on what I've heard today and the comments I've heard at least from a couple of people on the Board, I think it might be a smart idea for the Board to actually communicate in writing and not just informally

to the Strategic Growth Council about some of our concerns about how they are approaching the process.

I want to be positive in supportive because it is the first time through maybe that Mike McKeever's comment that we should just punt for a while may end up being the wisest thing to do. But even if that happens, it still is going to be coming at us again before we know it.

So laying out some of the considerations that people have pointed to here, particularly in terms of tying the funding to already adopted sustainable communities finance seems like sort of a no-brainer. But we're not there yet.

So anyway, those are some sort of opening comments. And I'll go to Mr. Serna.

BOARD MEMBER SERNA: Thank you, Chairman Nichols.

I, too, want to thank staff for an exceptional staff report. And I also want to agree with our esteemed Chairman that I, too, agree that Mike McKeever is the dean of the MPOs. I've been fortunate also serving on the SACOG Board of Directors and was very involved with the development of our SCS. Great appreciation for his leadership and his thoughtfulness. And it's also reflected in today's comments.

I'm glad that the Chairman opened up with the mild suggestion that that's what, in fact, it is to

perhaps communicate in writing to the SGC the fact the knowledge I would presume in that correspondence that we don't have -- we're not charged with the same responsibilities they are. But nonetheless, we do find this an issue that is important enough that we might make some respectful suggestions.

Some of those I think were articulated quite clearly by Mr. McKeever and others, some other MPOs. The ones that resonate most with me are certainly trying to get our sister agency to think more clearly about performance standards versus prescriptive measures or implements.

I think it's very important to understand the messenger here, which is the MPOs. The MPOs are the ones that quite frankly having served on the Board have that expertise. They have that knowledge base. They have the modeling and they do it well. And I know that's true across the state. There are certainly different levels of challenges from region to region. But I think it's safe to say overall it's at the regional level where that expertise is best applied and we have to take advantage of that.

So those are kind of my thoughts. I would be curious to hear from other colleagues about the submission that the Chair has made. I think it's a very good one.

Not sure if we are capable of today or not of actually setting that in a motion, but if there is a will of someone to do that, I would be very supportive of that.

CHAIRPERSON NICHOLS: I'm looking at Lynn Terry and Terry Roberts and thinking they're quite capable of taking notes and putting this all into a good letter.

BOARD MEMBER SERNA: Great. Thank you.

BOARD MEMBER GIOIA: I think this has been a good discussion. And just to make sure I understand from the chart on the effective dates, which is why I wanted to know the dates of the plan.

So for San Joaquin, the updated targets will be effective 2018, meaning for their second update; correct? I just want to be clear about that. I think it's important.

I think it's important to continue to keep aggressive on the targets. And we realize that each region has tried to approach this in a unique way and at the same time I think we can provide the leadership to ensure the regions are pushing the targets some more aggressive.

And frankly, I know having been through the Bay Area for those in other parts of the state, including especially in the San Joaquin Valley where they were not as aggressive on some of the measures, we can be helpful

in continuing to push that along and realizing that it's a challenge in obtaining funding.

I do think one of the things we can do is be an advocate for more funding for the plans. And I do believe that there is this sort of belief that the cap and trade funding that will be the only funding to help. It will not. And the idea is that cap and trade is meant to leverage other funding sources as well.

So I do think in our comments to the Strategic Growth Council -- we should clarify that the council of Governments are eligible, and because I think frankly a lot of the good work is going on on a regional basis. And while cities and counties individually will be able to apply, frankly, a lot of the effective programs are going to be on a regional level. And so I frankly think we need to sort of clarify that and be a voice on that issue. The regional agencies themselves can apply for the funding,

Advocating for more funding, obviously there's only a certain amount in this year's budget. But for the future, getting back to the Resolution that was cited when we started this a couple years ago that we said, yes, we wanted to help the voice for funding to implement this these plans and acknowledging it's not just cap and trade funding.

So I don't want to repeat what others have

mentioned. I know you've been through this in Sacramento as well. But agreeing with the Chair's comment, we should provide the comments back to the Strategic Growth Council on this as well.

CHAIRPERSON NICHOLS: Great. Down at this end, I'll start at the far end.

BOARD MEMBER MITCHELL: First of all, full disclosure, I'm a member of the Regional Council for the SCAG region. So I've worked through this process such as Supervisor Gioia has and Supervisor Serna I believe also.

And I want to say that right now our first priority is implementing the SCSs that we presently have, and so all of us are diligently working on that. I do think that as we move forward to the next set of targets that we need to allow flexibility in that. What's so interesting about this -- and one of the speakers did mention this -- is that the regions across the state all have different deadlines for their RTPs and SCSs. So I think one of the things that they've talked about is can we go to the federal government and get a -- coordinate this so we all have the same deadline. I don't know if that's good or not, because it puts some real burdens on staff when they have to work all of them at once.

But I also want to commend Terry Roberts on all the work she has done because she has this wonderful

demeanor that is so acceptable and easy to work with. She really is an example of the cooperative collaborative staff person. And that brings up the issue that Hasan Ikhrata mentioned, and that is how important it is to go into partnership and collaborate with the funding on this. What we have is a pot of money, sort of 13 agencies looking at that money.

And my concern is that if we don't work together on this, you could see some duplication of effort and really lose of the most effective means of using those funds. So I think our letter to SGC on that would be a very good idea because we need to emphasize how important a collaboration is in this whole exercise.

So I think that's -- the others have mentioned the problems, and I think flexibility and timing is key because every MPO and the big MPOs have different issues with their timing. And if our staff could listen to what their concerns are, kind of work with them on that timing.

Sometimes the timing may just be a difference in step one, but we still get to the end date of target setting at the same time we would have gotten there anyway. But the announcement of the targets or the exact pinning down with what those targets are, that might be postponed, but still get at the end date at the same time. So thank you very much.

CHAIRPERSON NICHOLS: Great.

BOARD MEMBER SPERLING: I have two thoughts.

One is I support the general discussion on funding. In fact, I see SB 375 as having two roles. One is to provide an organizing framework for regions to actually pursue all the strategies they probably already want to do, whether it's dealing with infrastructure, livability, health, so on. But it does provide that structure. That's good.

But then it does come back to where are the carrots and sticks, and the carrots especially. So the conversation of funding is good.

Where I was a little unclear is there is this follow-up conversation about other funding. I've always had the thought in my mind that eventually we would be able to influence how the huge amounts of transportation funding is allocated in such a way that it would be restructured to reward the MPOs, the regions that do have strong SCSs, and are achieving their targets. And I've not heard any discussion on that. And I'm just -- so it seems like that's the really big opportunity. And really if anyone is going to champion that, it seems like that should be us. Of course, we can't do it ourselves, but we do have all the connections and so on. So that was one point.

And the other is what is the strategic plan for ARB in this area in terms of what it's actually going to do? Like, there is a mention of best practices. Is that -- I mean, I know this is kind of a new area for ARB and we're building the staff. Where are we going with this? To what extent are we really going to help and how, you know, these different regions and cities and counsels and so on? So you know, both of those thoughts I was interested in a response.

DEPUTY EXECUTIVE OFFICER TERRY: On the best practices, that was something of course you remember from the original RTAC discussion, a lot of dialogue on it. And we have taken a first step, which is to use our wonderful U.C. system to have some white papers done to try to pull together the documentation empirical studies on the value of different strategies. I consider that to be the heart of the best practices effort.

Now that we have a first round of SCSs to be implemented, I think looking at the common elements and using some staff resources to pull that information together as a starting point, here's what's been done so far. Here's the commonalities. Here's some ideas for future exploration that we might want to see in scenario analysis that we expect the MPOs to do in the next round would be an obvious next step that's directly linked to

the target setting.

And then in addition in our research program, I think there's opportunities for us to expand on the in-house staff work as we move forward with the program.

On the funding issue --

BOARD MEMBER SPERLING: Can I follow up on that?

Have we gotten much explicit feedback from the MPOs and
the local governments about what they think they need and
what would really be helpful? Of course, it's different
for the big MPOs versus others. I mean, what you said all
makes sense. But what are we hearing?

DEPUTY EXECUTIVE OFFICER TERRY: I'll ask Terry if she wants to comment on that.

MANAGER ROBERTS: Dr. Sperling, Lynn mentioned the literature reviews that we've done over the past few years that resulted in over 20 policy briefs that describe different land use and transportation strategies, some but not all MPOs are putting into their SCSs.

Just a couple weeks ago, was it early October, we held a seminar with Susan Hendy, who is one of the key researchers, to present the results of this information. And there was such a great amount of interest. We have people traveling from all over the state to come to Sacramento, observe that research seminar, and we have people e-mailing us from other states and other countries.

So we know it was widely noticed.

And we know that MPOs are looking very carefully at these policy briefs to find out what strategies are being used in different cities, states, and what kind of effect it had. And what to be able to share the information from the these literature reviews to tell their local residents and communities about the benefits that could be accrued if certain policies were accepted and put into their regional plans.

So I just wanted to mention that, and the fact that it's been widely noticed and appreciated. We have gotten thanks from many of the MPOs. I think the next step here is to make sure that the MPOs not just talk to us but talk to each other. And I think that's where we can play a roll of facilitating that kind of cross pollination which we have done to a certain extent which it comes to talking about regional scenario planning.

BOARD MEMBER SPERLING: Could I ask that actually staff put together a real plan with activities and maybe it's a strategic plan with action items.

And the reason I'm suggesting that is because most of us on the Board here are really interested in helping out. And we have lots of other connections in our various organizations. And I think if we had something like that, it would be very useful. And also it would be

a mechanism for us to give feedback as well as the MPOs and others to give feedback. I think we've reached a threshold where we've got to up the game and figure out, you know, what that really means.

Is that reasonable suggestion?

CHAIRPERSON NICHOLS: It's a perfectly reasonable suggestion. I think it should be fed into a process that Richard Corey I know has underway at the moment to work with all the deputies on some planning activities. So if you don't mind, I don't want to punt, but I also don't want to single this out as the only thing that needs some strategic planning.

But I do think it's worthy of a separate sort of call-out-able, if that is a word, distinguishable set of activities. So I see a nod, but maybe you can add.

DEPUTY EXECUTIVE OFFICER COREY: The message came through loud and clear. And we are -- Chairman Nichols is right on point in terms of the deputy team going through a broader planning process right now and to meet this discussion in open forum like we're doing and we can report back.

CHAIRPERSON NICHOLS: I think this does have a public constituency. And so let's try to move it ahead.

BOARD MEMBER SPERLING: Just that quick comment on money. What are we doing about getting other kinds of

money? Or what are the opportunities?

DEPUTY EXECUTIVE OFFICER TERRY: Do I want the talk about money? No.

BOARD MEMBER SPERLING: You're retiring soon. You can say anything you want.

DEPUTY EXECUTIVE OFFICER TERRY: I think again, I totally agree with. You when we started this program and worked on targets and with the RTAC, we hoped that beyond the incentives imbedded in statute is that somehow we can take the transportation funding process, whether it's federal, state, or local to be an effective tool to make things happen on the ground.

We have a lot going on in terms of partnership -new partnerships with Caltrans and our state
transportation planning agencies in multiple arenas. So
if the Chairman agrees, I think this might be another one
we add to that list of topics that we work with on the
state funding structure.

And ARB staff are clearly not experts on the funding process. I think we're going to need to learn in collaboration with our transportation agencies at all levels.

I certainly hope that going forward as the federal transportation bills get reauthorization that the state of California and hopefully some of our other

partner states can influence the criteria for federal funding uses along these lines. So I think there is a clear will for the Board going forward with that.

CHAIRPERSON NICHOLS: Okay. Thank you.

Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: I think everybody has a expressed a lot and I would like to -- knock on wood.

Comment was made about how this process at the local level community conversation changed. I think this has been an extraordinary example of community conversation change. This is not what I was hearing two years ago. And seeing all the players, the stakeholders, the entities here today having this conversation all in the same room really very similar kind of shared concerns. Very much on the same page about what people want to achieve. So can they add to those three Cs, civility, collaboration -- and I'm sure people can come up with others. So I'm glad to see you scribbling the -- drafting your letters here.

CHAIRPERSON NICHOLS: Any other -- yes?

BOARD MEMBER GIOIA: Just one comment. I think we have to think about our efforts in a way that provide the leadership direction to get the regions to continue to work and push the goal for one really important reason:

For those of us who are involved in this in our regions

and it's different around the state, this was a really difficult thing to do. I can't impress on those of you who were not involved with developing these plans how difficult it is to change the community conversation on this. I think there was great leadership in various regions to move this.

So to the extent that we can be helpful to the electeds in the regions, because frankly there was some very from strong people in the Bay Area who were threatened with recalls over this type of developing this plan. There was an amazing backlash by many communities.

But in the end, sort of, it was developed and clearly there was some opposition from some sectors that continued. So I think our efforts should sort of provide -- I don't say the cover, but the ability for the local electeds to continue to push the envelope on this.

And that's both from a standpoint of we talked about the best practices, what other regions are doing, how to access additional resources, and frankly to set the aggressive goals. Because sometimes it's easy. For those at the local level who are facing a tough situation, it's easier to say, the folks at the state are helping push us in this direction. So it provides a certain amount of justification for them to continue pushing the envelope.

So just based on personal experience, I think as

a Board and an agency, we can be very helpful in that regard.

CHAIRPERSON NICHOLS: I think so, too. That's great.

Ms. Berg.

BOARD MEMBER BERG: Thank you. Well, I really appreciate you sharing that information, Supervisor Gioia, because it really also speaks to the six smaller MPOs. And I think after yesterday's conversation, the smaller guys get kind of swept up into these programs. And where are the resources that are available for the six smaller guys?

I think one of the things that struck me and especially on the last testimony was the fact that smaller MPOs don't have the people in the departments that are the planners and the target setters and then a separate department for implementer. It's all the same department.

So when we look that they are going to be tasked with setting targets earlier than even the large people, I think that we've heard across the board here the importance of timing and flexibility. And I hope, Chairman, that we would be able to stay open to the fact that as we're looking to set new targets and aggressive targets, as Supervisor Gioia just mentioned, that we would be understanding that we're not inhibiting the six

smallest MPOs from really getting traction and getting meaningful successes moving ahead.

And the other thing that really struck me is nobody on this Board represents or is participating with the six small people. We have wonderful participation for all the large. And so maybe that is another thing we can take a look at. Thank you.

CHAIRPERSON NICHOLS: It's a challenge working with the diverse boards in the valley. Ms. Roberts has been spending a lot more time than she ever thought possible, I suspect, on the road working with the smallest of the MPOs. But it's really taxing our resources I think to do this effectively with all of them.

A lot of good work is being done on the technical support side though, and that's probably the place where we actually contribute the most.

So while I feel empowered to sign a letter on behalf of the Board making the points that I think all of us have stressed here, I'll send it to you anyway so you can all have a look at it. It sounds like a good step forward anyway.

So thanks to everybody for coming and participating, all your hard work. And that I think is the end for this item.

We do need to allow for a time for general public

comment, if there is anybody here. Did anyone sign up? No, they did not. All right.

Then all we have to do is to adjourn briefly for a briefing on pending litigation. There is no action being requested. I will come out and make an announcement after the executive session is over just to confirm that we didn't do anything, assuming that remains true. But nobody else needs to do that. But I would appreciate your joining me in the staff room for a brief executive section. Thanks, everybody. And we will be adjourning other than that last report.

(Whereupon the Board recessed into closed session from 11:29 a.m. to 12:12 p.m.)

BOARD MEMBER SHERRIFFS: So we are back on record. Alan Sherriffs acting as Chair here. We met in closed session to discuss litigation. Made no action. And this meeting is adjourned. Thank you.

(Whereupon the California Air Resources Board adjourned at 12:12 p.m.)

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

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me,
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I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of November, 2014.

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