MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

CAL/EPA HEADQUARTERS

BYRON SHER AUDITORIUM

SECOND FLOOR

1001 I STREET

SACRAMENTO, CALIFORNIA 95814

FRIDAY, JULY 25, 2014 8:42 A.M.

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

APPEARANCES

BOARD MEMBERS

Ms. Mary Nichols, Chairperson

Mr. Hector De La Torre

Mr. John Eisenhut

Supervisor John Gioia

Mayor Judy Mitchell

Supervisor Phil Serna

Dr. Alex Sherriffs

Professor Dan Sperling

STAFF

Mr. Richard Corey, Executive Officer

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

Ms. Katrina Sideco, Air Resources Engineer, Fuels Section, Industrial Strategies Division

APPEARANCES (CONTINUED)

ALSO PRESENT

- Mr. Will Barrett, American Lung Association
- Ms. Dina Biscotti, BlueGreen Alliance
- Ms. Amber Blitz, Independent Energy Producers Association
- Mr. Craig Breon, Kern-Kaweah Sierra Club
- Mr. Todd Campbell
- Mr. Cesar Campos
- Mr. Tim Carmichael, California Natural Gas Vehicle Coalition
- Ms. Heather Dumais
- Mr. Quentin Foster, CalETC
- Ms. Veronica Garibay, Leadership Counsel for Justice and Accountability
- Ms. Jamie Hall, CALSTART
- Ms. Carey Knecht, Climate Plan
- Mr. Adam Livingston, Sequoia Riverlands Trust/Southern Sierra Partnership
- Ms. Jerilyn Lopez-Mendoza, Southern California Gas Company
- Mr. Bill Magavern, Coalition for Clean Air
- Mr. Simon Mui, NRDC
- Ms. Rachael O'Brien, Union of Concerned Scientists and Consumer's Union
- Mr. Timothy O'Connor, EDF
- Mr. John O'Donnell, Glass Point Solar

APPEARANCES (CONTINUED)

ALSO PRESENT

Ms. Liz O'Donoghue, The Nature Conservancy

Ms. Cathy Reheis-Boyd, WSOA

Ms. Katelyn Roedner Sutter, Catholic Charities Diocese of Stockton

Mr. Chuck White, Waste Management

Ms. Ella Wise, Natural Resources Defense Council

INDEX

	PAGE
Item 14-6-7 Chairperson Nichols Executive Officer Corey Staff Presentation Ms. Roedner Mr. Livingston Mr. Breon Ms. Dumais Ms. Knecht Mr. Magavern Ms. O'Donoghue Ms. Wise Ms. Garibay Mr. Campos	3 4 5 22 25 26 29 31 32 34 35 37
Item 14-6-8 Chairperson Nichols Executive Officer Corey Staff Presentation Ms. Roedner Sutter Ms. Reheis-Boyd Mr. Foster Mr. O'Donnell Mr. White Ms. Lopez-Mendoza Ms. O'Brien Mr. Hall Mr. Magavern Ms. Biscotti Mr. Mui Mr. Carmichael Mr. Barrett Mr. O'Connor Mr. Campbell	62 62 64 79 80 84 85 88 93 94 96 98 99 101 103 103 106 108
Public Comment Ms. Rothrock Ms. Blixt	114 116
Adjournment Reporter's Certificate	122 123

PROCEEDINGS

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

CHAIRPERSON NICHOLS: Good morning, ladies and gentlemen. Welcome to the July 25th, 2014, public meeting of the Air Resources Board. Would you please rise while we say the Pledge of Allegiance?

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

CHAIRPERSON NICHOLS: I was reminded by the conversation up here that today is the day the heat is predicted to reach 100 degrees. So I have the power as the Chair of the Air Resources Board to direct everybody who's wearing a tie to take it off. I can't. But you can take your jackets off, too. Let's be sensible here. All right. Thanks, everybody.

The Clerk will please call the roll.

BOARD CLERK JENSEN: Dr. Balmes?

Ms. Berg?

Mr. De La Torre?

BOARD MEMBER DE LA TORRE: Here.

BOARD CLERK JENSEN: Mr. Eisenhut?

BOARD MEMBER EISENHUT: Here.

BOARD CLERK JENSEN: Supervisor Gioia?

BOARD MEMBER GIOIA: Here.

BOARD CLERK JENSEN: Mayor Mitchell?

BOARD MEMBER MITCHELL: Here.

BOARD CLERK JENSEN: Mrs. Riordan? 1 Supervisor Roberts? 2 3 Supervisor Serna? 4 BOARD MEMBER SERNA: Here. 5 BOARD CLERK JENSEN: Dr. Sherriffs? 6 BOARD MEMBER SHERRIFFS: Here. 7 BOARD CLERK JENSEN: Professor Sperling? 8 BOARD MEMBER SPERLING: Here. 9 BOARD CLERK JENSEN: Chairman Nichols? 10 CHAIRPERSON NICHOLS: Here. 11 BOARD CLERK JENSEN: Madam Chairman, we have a 12 quorum. 13 CHAIRPERSON NICHOLS: Excellent. I feel like I 14

CHAIRPERSON NICHOLS: Excellent. I feel like I can skip the usual announcements this morning because most of you were here yesterday. But for those of that you weren't, this is a reminder for those of you that want to address the Board, fill out a card before the item comes up or at the very beginning of the staff report so we know who's going to be speaking and can plan our time accordingly.

15

16

17

18

19

20

21

22

23

24

25

And also I'm required by the building management to announce that there are exits, two the back, two on the sides. And in the event of a drill, alarm going off, we are required to leave the building promptly by the stairs back there and not to return until we hear an all-clear

signal.

Other than that, I think we can get right into our program for this morning. And we're going to begin with an update to the Board on the San Joaquin Valley sustainable community strategies. I think everyone remembers that we started this discussion recently in the May Board meeting. And while today's hearing informational item really doesn't involve any decisions about acceptance or rejection of any of the NPO determinations that their sustainable community strategies will meet the greenhouse gas targets the Board established, the Board felt it would be useful to have another opportunity to learn more about what's happening with the valley plans and to hear from the staff about their ongoing review of these plans.

We are very pleased that we're joined today by several of the NPO directors from the valley. We're glad our first encounter didn't scare you away, and we're very grateful for your work. We truly are appreciative of the fact that this is something new and that you're all taking part in something that feels like a bit of an experiment. But we have a lot of confidence that it's going to produce something worthwhile.

So with that, I will turn it over to Richard Corey, our Executive Officer.

DEPUTY EXECUTIVE OFFICER COREY: Thank you, Chairman.

2.4

The per capita greenhouse gas emission reduction targets the Board adopted for the eight San Joaquin Valley MPOs in 2010 were five percent by 2020 and 10 percent by 2035 from a 2005 base line. As of this week, six of the eight valley MPOs have adopted the regional transportation plans, and the last two are scheduled for adoption in the next few weeks.

In May, staff's presentation focused on the four largest valley MPOs. This included looking at how their draft plans were expected to perform with respect to a variety of land use and transportation metrics. Since May, staff has been delving deeper into obtaining a better understanding of how the land use patterns in each of the eight regions could change as a result of the SCS implementation, the technical analysis used by the MPOs, especially with regard to the inter-regional travel and sensitivity testing of the models.

Today, we'll hear what staff has learned about the valley SCSs since we last presented to the Board two months ago. Today's briefing is an interim status report. Staff's technical of the GHG determinations is still mid-stream and will continue through the summer.

Staff is targeting this fall to bring the first

value SCS, Fresno's, to you for formal consideration.

With us again today are Andy Chesley, Executive Director of the San Joaquin County Council of Governments; Ahron Hakimi, Executive Director of the Kern County council of Governments; Tony Boren, Executive Director of the Fresno Council of Governments; and Carlos Yamzon, Executive Director of the Stanislaus Council of Governments.

Thank you all for attending the meeting and being able to help answer any questions.

I'll now ask Terry Roberts from our Transportation Planning Branch to begin the staff presentation.

Terry.

2.4

(Thereupon an overhead presentation was presented as follows.)

SUSTAINABLE COMMUNITIES POLICY AND PLANNING SECTION MANAGER ROBERTS: Thank you, Mr. Corey.

Good morning, Chairman Nichols and members of the Board.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: In this presentation, we will
look at how the San Joaquin Valley Sustainable Community
Strategies, or SCS, planning process, is setting the stage

for more sustainable land use and transportation policies.

We will provide an overview of the steps that staff is taking to evaluate the ability of the valley models to capture the greenhouse gas benefits of the SCSs developed by the eight county MPOs in the San Joaquin Valley. Since the May Board meeting, several valley MPOs have begun to provide additional technical information that will help staff to assess whether their SCSs can achieve their greenhouse gas emission reduction targets. Staff technical review of the greenhouse gas quantifications on the valley SCSs will be done for each one, and we will report the results at future Board meetings.

We will conclude the presentation with a preview of the work that staff is doing to prepare for the Board Item in October on a target update process.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: In 2009, the San Joaquin Valley
Regional Policy Council approved its first blueprint
planning scenario developed jointly by all eight MPOs.
Each of the 2014 SCSs is unique to the region. But in
general, they build on the valley-wide blueprint by
encouraging a more compact urban form and expanding
opportunities for alternative travel modes in their

respective regional transportation plans, or RTPs.

The next set of slides highlights specific aspects of four of the eight valley SCSs, including those of Fresno, Stanislaus, San Joaquin, and Kern Counties. By contrasting the previous RTPs with their latest RTP SCS, we see changes in growth policies and investment priorities.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: In Fresno, the 2014 SCS
encourages a land use pattern that projects one-third
fewer acres of land being used for developed as compared
to Fresno's 2011 RTP. This is the result of a more
compact urban form with an increasing amount of
multi-family housing. Over one-third of new homes would
be multi-family units, compared to the historical trend of
15 percent multi-family units.

Residential density is forecast to increase from 4.6 units per acre to over seven units per acre, especially along new bus rapid transit routes that are planned or under construction. By 2025, over a quarter of new housing and 70 percent of new jobs would be located within one half mile of a transit stop with frequent service.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Fresno's 2014 RTP SCS contains
investment policies to enhance alternative modes of
travel, in places where new growth is planned. The amount
of funding for bicycling and walking infrastructure has
increased by 25 percent compared to the last RTP.

There is also an increase in transit funding for expansion of existing services and for five new bus rapid transit lines, the first of which is under construction. The increases in funding for transit and active transportation are accompanied by a decrease in investments in roadway capacity expansion projects.

A photo here is one example of a transportation strategy in Fresno to reduce vehicle travel by providing new bike infrastructure. Gettysburg Avenue was converted from a four-lane road to a two-lane road with a center turn lane and new bike lanes in each direction. This roadway was identified in the City's 2010 bike and pedestrian master plan as a critical link in the bike network. It offers a safer environment for motorists and bicyclists and promotes complete streets for all modes.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Here are some examples of
building projects that have been constructed or are under

construction in Fresno County. The top two photos show projects in the city of Fresno. The 1612 Fulton project, completed in 2013, is a mixed use project with 30 residential units, including twelve live/work units. It is within one-half mile of existing transit and also within a half mile of the county's first BRT line currently under construction.

On the right is the Droge mixed use project, which when completed will provide 45 residential units and 3,000 square feet of commercial space. It is also within a half mile of the new BRT line.

At the bottom of the screen is a mixed use affordable senior apartment project in the city of Kingsburg, population 11,000, which will be completed next year.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: The land use policies in
Stanislaus' SCS would result in a consumption of 25
percent less land compared to historical growth trends.
This is in part because one-third of all new housing units
would be multi-family, which requires less land per unit
than single family home construction. The SCS forecasts
that 25 years from now, over one-third of homes would be
within a half mile of frequent transit service.

Overall, new residential development would increase in density from about eight units per acre to over 11 units per acre.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: More compact growth would be
accompanied by larger investments in transit, as evidenced
by the allocation of three times as much funding for
transit as compared to the 2011 RTP. In addition, the
2014 plan dedicates less funding for capacity-expanding
roadway projects.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: These projects in the city of
Newman, population 10,000, demonstrate efforts to
revitalize the city's downtown with the Mustang Peak
Village Residential Infill Project and the Downtown Plaza,
which won a San Joaquin Valley Blueprint Award.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Now let's look at some examples
of the San Joaquin SCS, which would result in land use
changes as compared to their previous plan. These changes
are reduced consumption of lands for new development, a
substantial number of new housing units being multi-family

rather than single family, increases in average residential density, and an increase in the number of jobs and housing within walking distance of high quality transit service.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: The more compact infill
development encouraged by San Joaquin COG's SCS is
supported by a wider range of travel options due to
changes in funding priorities in the 2014 RTP. The
funding for bicycle and walking infrastructure has
increased, with plans for over 800 miles of new bicycle
lanes. There are targeted investments to improve transit
service and routes, with one third of the total transit
budget dedicated to system expansion.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Here are some examples of
projects in the cities of Stockton and Tracy that
demonstrate smart growth concepts of mixed use infill and
downtown revitalization.

On the left is an artist's rendering of the Cal Weber project, a planned conversion of an historic building to mixed use affordable housing. On the right is the completed downtown Tracy plaza revitalization project

located adjacent to planned mixed use and residential buildings.

2.4

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Now let's next turn to Kern.
The metropolitan Bakersfield area is already home to over
40 percent of Kern County's population and the SCS plans
for much of the region's growth to be focused here. This
would enable the county to make better use of targeted
transportation investments. The number of homes within
walking distance of high quality, frequent transit service
would nearly double in the next 25 years.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Compared to past plans, Kern's transportation plan dedicates more funding to transit and infrastructure for biking and walking. The plan allocates seven times more funding for transit-related capital projects. Kern also plans to spend six times more on bike and walk projects, which include over 1,000 miles of bike routes.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: As in other counties, here are a
few examples of efforts to revitalize downtowns to attract

and accommodate infill growth.

The Baker Street project on the left was completed in 2011 and is a mixed use infill development within a quarter mile of transit. On the right is a plan view and street view of the Bakersfield historic arts district, which is being revitalized through public-private partnerships. These examples illustrate that with public and private support, infill projects can be done in communities like Bakersfield.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: In order to provide the Board
with recommendations on our review of the greenhouse gas
quantifications for the valley SCSs, we have initiated a
comprehensive technical work plan. The next few slides
provide an overview of the work underway to evaluate the
basic performance of the valley travel models, the model's
sensitivity to land use and transportation strategies,
their sensitivity to key inputs and assumptions, and to
identify how the models estimate inter-regional travel.

As we go through the next few slides, you'll see that our evaluation of the valley model results is analogous to how we view air quality modeling results. In other words, we check to see if the models can replicate observed data, whether they are sensitive to changes in

selected variables, and whether the input data and assumptions are reasonable.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: The valley MPOs are using the same core model which was developed through funding from the Strategic Growth Council and Fresno COG has provided theirs to us.

ARB staff is running the model to evaluate its ability to represent modeling variables, such as the number of person and vehicle trips, the average length of those trips, the mode used by trip purpose, and traffic volumes, and VMT estimations. Staff will compare the model's outputs to observed data from reliable sources such as the American community survey and the California household travel survey.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: At ARB's request, MPO staff and consultants are conducting sensitivity tests on each of the regional travel models. These sensitivity tests will help us to understand the ability of the models to respond to land use and transportation strategies that are reflected in their SCSs, including the types of projects and transportation investments mentioned earlier in this

presentation.

2.4

On this slide are several examples of the sensitivity tests that ARB has requested. Note that the transit-related tests are relevant only for those MPOs that have a transit network. We have requested a variety of sensitivity tests on each of the COG's travel models and we're beginning to receive some preliminary results.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Part of our review process
involves examining the input data and assumptions in the
valley models. As we review each greenhouse gas
quantification, we will evaluate how well the particular
valley model responds to macro influences, such as auto
operating cost, economic activity, and household income
distribution. These factors influence the model's
representation of travel behavior and therefore can affect
the greenhouse gas quantification. In looking at the
assumptions about auto operating costs, we will learn
whether the models take into account all the various
components of cost, and not just fuel price.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: As we know, in a single county
MPO, inter-regional travel can greatly influence

greenhouse gas quantification. San Joaquin COG is running the three county model to shed some light on the impact of inter-regional travel in the northern counties of San Joaquin, Stanislaus, and Merced.

Within this larger multi county area, more trips would be counted as local or internal and the related greenhouse gas emissions can be captured. The relative difference between the results of the single county models and the results of the three county model would help us to understand the influence of inter-regional travel. We expect to have the results of the three county model runs soon.

In addition, staff is consulting with outside modeling experts in reviewing the basic algorithms or equations in the valley models to shed light on the ability of the models to forecast inter-regional travel. Inter-regional travel is not just a valley issue. As part of our work on a future target update, which you'll hear about in a minute, we are also looking into improved inter-regional travel estimation methods statewide.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING SECTION MANAGER ROBERTS: Now I'll briefly discuss the next steps for review of the greenhouse gas determinations.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Review of the valley models and related technical information is underway and will continue through this summer and fall. We expect to complete eight separate SCS evaluations, one from each of the eight MPOs, over the next few months, starting with Fresno COG this fall.

After Fresno, we will complete our evaluations of the San Joaquin's and Kern's determinations and the remaining valley MPO determinations. We will present you with staff reports on each one in late 2014 and early 2015.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Concurrent with our work to
review the valley's GHG determinations, staff is also
preparing for the Board discussion in October regarding a
future target update process. Earlier this year, the
Board requested that staff present an item in the fall to
talk about when and how to update the SB 375 targets.
This will be the subject of the October Board Item.

SB 375 directs ARB to update greenhouse gas emissions reduction targets every eight years and may update the targets every four years.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: We are beginning now to prepare
for the October Board Item. Stakeholders are eager to
provide input on a wide range of factors that should be
considered, and we will ensure opportunities for public
involvement and discussion before the October meeting.

Next month, staff will release a draft staff report that discusses a range of issues and factors that should be considered when the Board updates the targets. I'll talk about some of those considerations in just a moment.

In September, staff will host a second round-table meeting of stakeholders and workshops to receive input on the draft staff report. At the October meeting, staff will present recommendations on a target update process for Board consideration. The next slides identify examples of the policy, technical, and timing issues that staff intends to address in the staff report.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Listed here are several policy
considerations in updating or revising the regional
targets. SB 375 is just one of the ARB's many programs to
reduce greenhouse gas emissions from the transportation

sector. We believe it's important to highlight the combined benefits of regional land use and transportation strategies and ARB's vehicle technology and fuels programs.

2.4

The public discussion about SB 375 often centers on the many benefits of sustainable communities, including public health benefits from the increased opportunity for active transportation and more walkable communities. This is an important context for the target-setting process.

We also know that resource protection, including preservation of open space and farmland, is an important benefit of improved land use planning. We will highlight these among the policy considerations in updating the target.

Other benefits of sustainable communities include water savings and cost savings, just to name a couple.

A critical policy consideration is the extent to which regional and local governments continue to engage in a positive way and build the momentum for local support of SB 375. To date, MPOs have worked very hard to develop SCSs with the participation and support of local governments. We want that model of cooperation to continue in future SCS development.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING

SECTION MANAGER ROBERTS: Here are some examples of the technical considerations that staff plans to address in the staff report for October.

As mentioned earlier, we need better tools and data to account for inter-regional travel, and staff has begun a dialog with modeling experts, not only to understand how inter-regional travel is currently estimated, but also to explore alternative methodologies that could be used in the target update process and in future SCS development.

We will explore the ways in which MPOs are improving their modeling capabilities to better represent the greenhouse gas benefits of land use and transportation policies in their scenario planning and SCS development.

We will also explore how the input data and assumptions in the regional models can be improved.

Another technical consideration is the method of accounting for the greenhouse gas benefits of regional and local policies that accelerate the purchase and use of zero emission vehicles since rapid penetration of the ZEVs into the vehicle fleet is an important goal.

Finally, we will look at how to best quantify the combined greenhouse gas benefits of SCSs with ARB's vehicle and fuels programs to assess progress in meeting the state's greenhouse gas reduction goals.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: From a practical standpoint,
MPOs need to have enough time once the targets are revised
to engage in an effective local planning process and
develop an SCS that can achieve the targets.

For the largest MPOs in the state, the planning progress begins three to four years before the next plan has to be adopted. Even for the smaller MPOs, plan development can take two to three years. May MPOs may want to take advantage of the provision in the law that allows them to recommend their targets to ARB, but they would need to provide those recommendations to us early enough so that they can be considered by the Board.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING SECTION MANAGER ROBERTS: And because each MPO is on a different planning and adoption schedule, one issue for consideration is whether some targets should be updated earlier than others.

--000--

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: In conclusion, there is a
detailed review of San Joaquin Valley modeling underway.
And over the next few months, each valley GHG emission

reduction determination will be evaluated.

2.4

Staff is also developing a proposal on the update process for regional targets for all MPOs for Board consideration at the October Board meeting.

Finally, we will return to the Board beginning in the fall with separate staff reports that will document the results of our evaluations for each of the valley MPOs greenhouse gas determinations.

Thank you. That concludes the staff presentation. Thank you very much. I'm happy to answer any questions.

CHAIRPERSON NICHOLS: Thank you, Ms. Roberts.

I have a list of witnesses here, but it does not show the representatives of the valley. Are they not planning to speak this morning? Okay.

Shall we just go ahead and listen to the audience then? You have the list up there on the Board. If you're planning to speak and you haven't put your name on, please go see the clerk right away so we can plan our time. Everybody gets three minutes and welcome.

MS. ROEDNER SUTTER: Good morning. My name is Katelyn Roedner Sutter. I'm the Environment Justice Program Director for Catholic Charities in the Stockton Diocese.

Thank you very much for the opportunity to speak

with you this morning.

Catholic Charities has convened community coalitions in San Joaquin and Stanislaus Counties, which successfully advocated for aggressive and achievable sustainable community strategies. While we would certainly love to see even more done, we are pleased with the work these COGs have put into their SCSs and are very encouraged by the progress that we see. San Joaquin COG is already taking some concrete steps towards implementation with broad community and stakeholder engagement, which gives us reason to be optimistic these plans are achievable and will achieve their GHG and VMT reductions.

Stanislaus has made tremendous strides in protecting its valuable farmland and San Joaquin has reduced highway expansion funding by over one billion dollars, while increasing funding for active transportation. By extension, we also want to thank the Air Resources Board for supporting this important work.

To ensure the success of these SCSs, we ask that ARB carefully and thoroughly review these plans to ensure the reduction targets are being met through changes in land use and transportation planning. Many assumptions have been made in the development of these SCSs, and we would like the role of these assumptions versus the

valuable strategies put forth be clarified.

We would also ask that the modeling around inter-regional trips be clarified, and we're pleased to hear about the efforts going onto do this. Inter-regional travel has been a challenge, especially in San Joaquin County where we have a significant number of Bay Area and Sacramento commuters. COG Board members brought this issue up frequently in the SCS process and improved modeling on inter-regional trips would be very valuable for the next round of SCSs.

Additionally, we ask that during this review process ARB pay particular attention to the burden placed on poor and vulnerable communities. Not only do these communities suffer most from the poor air quality, limited access to transit, incomplete streets and poor planning overall, but they stand to bear a greater burden of increased fuel prices. Depending on increased gasoline prices to meet the targets is disproportionately burdening our most vulnerable communities.

Lastly, we ask that ARB provide support and technical expertise to our neighbors to the south, Madera and Merced, said as they develop alternative planning strategies to meet their GHG targets. All San Joaquin Valley residents deserve access to high quality transit and clean air so we ask that you provide the guidance and

expertise necessary to ensure this development. Thank you very much for your time and for the significant work on this sustainable community strategies by yourselves and your staff.

CHAIRPERSON NICHOLS: Perfect timing, too. Thank you.

Adam Livingston.

2.4

MR. LIVINGSTON: Thank you. My name is Adam Livingston. I'm here on behalf of Sequoia Riverlands Trust and the Southern Sierra Partnership.

First, I'd like to thank Air Resources Board and the valley COGs for the work they've done to implement SB 375 in this inaugural round of the SCS process.

As you've heard, several COGs, including some in the southern San Joaquin Valley where we work have made significant progress compared to their 2011 RTPs, with Fresno more than doubling funds for transit and Kern going from one percent of new development going into infill in their 2011 RTP to 21 percent in the current RPT SCS.

Having said that, we do have real concerns about how the targets are being met. And if future rounds are to build on progress that has been made so far, it's essential that ARB clarify the role of passive assumptions versus action oriented and programmatic strategies in the language of SB 375 in meeting the targets.

For that reason, we strongly support your decision to do a thorough review of modeling methods and sensitivities and would welcome a publicly available report making clear how much of each county's reductions is -- what portion of each county's reductions is attributable to active land use and transportation strategies.

Beyond preparing this report, making a decision about any particular SCS or even updating the targets for the next round, the single most important thing that you can do to ensure that the next round of the SCS process is a success is to make it absolutely clear that the only legitimate way to meet the targets is through action-oriented and programmatic land use and transportation strategies. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Craiq Breon.

MR. BREON: Good morning. My name is Craig Breon representing today the Kern-Kaweah chapter of the Sierra Club covering Kern and Tulare Counties, but I've also worked on Fresno, Madera, and Merced.

I want to talk about two concepts, transparency and tangible results. On transparency, the law is clear. It says that the MPOs are supposed to disseminate methodology, results, and key assumptions "in a way that

would be usable and understandable to the public."

Now, we praised Kern when they put out some of their information as an attempt on transparency. But they, in fact, got a fairly large backlash it seems from some of the other MPOs for too much transparency. They, in turn, have been back-tracking saying that the original table was not exactly as it read.

I want to emphasize that that kind of transparency, like Fresno turning over their model, is a good thing. And you should be encouraging the other MPOs to be doing the same thing.

Now the tangible results. SB 375 was considered to be a compromise law. And I'll use an example from Tulare county. In the foothills of Tulare County, Boswell Company is proposing to take a place called Yokohl Ranch, cattle ranch, and build a new city of 30,000 people, a completely car-oriented city essentially in the Sierra foothills.

Now, what will the Boswell Company get out of this law? When their EIR comes forward, they will not have to look at a reduced scale alternative. They will not have to look at their greenhouse gas emissions. They will not have to look at their impact on the regional transportation network, which could shift considerable transportation dollars from that private developer onto

the public because the private developer doesn't have to look at their impacts on the regional transportation network.

So developers in certain situations get some very concrete results. Now what did the communities get on the other side? They get some much better land use plans.

But as your staff noted, they used a lot of words like "encourage" and "forecast." We know those lands use plans are not binding on the local jurisdiction. They could happen or they could not happen. It will depend a lot on the advocates here and the many others around the valley to see if we can try to make those plans a reality. But the law doesn't require it be a reality.

On the transportation side, we've gotten some significant changes, I would admit. And it is thanks to many of my colleagues here, many of them who are not here in the communities and community organizations they represent, that many of those changes have come about and it is to their great credit.

And you have a role in both of these things. You and your staff have an important role to play in both transparency and tangible results. So I urge you to think of those two terms as you move forward with your staff and how you can serve the public in that manner. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Heather Dumais.

MS. DUMAIS: Good morning. I'm Heather Dumais, the San Joaquin Valley Air Policy Coordinator with the American Lung Association of California.

Actually moved to the San Joaquin Valley over ten years ago to study the dynamic air that we have there. It's been very exciting to work with the COG over these past two years on the SB 375 implementation. I specifically work with Fresno and Kern Counties through the first round and to engage in the dialog with the COGs directly on transportation and community development, which will ultimately lead to the reduction of wide-ranging health burdens and the greenhouse gases.

I'd like to share one quick highlight of our experience with the valley as a sign of progress. We've worked very closely with the COGs to more fully integrate the resources available through their local public health departments and we're seeing these relationships develop in a very meaningful way through the SCS process.

In San Joaquin and Fresno specifically, the health departments are going to be engaged in the implementation process. We appreciate the ongoing discussion between the ARB and COGs to ensure that the plans that have been adopted and the form they were presented during the May Board meetings are fully

understood.

Many questions still remain in our minds about the modeling, methodology, and accounting of all the overall benefits of these plans. We all need a clear view of whether these plans are meeting the targets and what role methodologies, modeling, and the assumptions and planning on doing so.

We very much appreciate the coordination going on with the consultants to test the models. And we really appreciate the Fresno COG that have provided their model to CARB for more robust review. We encourage all the COGs to share their models in such a manner to help speed the information needed to evaluate these plans.

As discussions move later into the summer through this process evaluating the SB 375 targets, we encourage the COGs to continue to work to produce thorough scenarios for what can be achieved within the base line plans adopted the date.

We believe that there will be more work to be done to answer some of the methodology questions and modeling capability questions highlighted in the valley SCS process.

We also encourage the Board to provide meaningful opportunities for public input into the process across the state.

And in conclusion, we believe that getting the SB 375 implementation right is vital to improving public health, social equality, and a sustainable future. We look forward to working with you to complete the first round of the valley plans. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Carey Knecht.

MS. KNECHT: Good morning. I'm primarily here today to thank the Board for continuing this important discussion. We very much appreciate ARB and the time that staff and Board members are putting into this important review of the valley. I believe that this review will highlight both important challenges and methodology questions that will be important at a state level as well as important best practices.

I appreciate the presentation today because many of the COGs have taken important policy steps forward and I'm pleased to see these highlighted. I'll just flag one more. Two of the valley COGs have cut road expansion dollars by approximately one quarter, shifting that money towards transit and active transportation. And it's powerful and action-oriented steps like these that are what we believe SB 375 was designed to promote.

At the same time, we know there are many questions that remain about the modeling and that valley

counties are particularly sensitive to things like inter-regional travel. So we hope that the review will help address those questions and highlight what portion of the GHG reductions does come from land use and transportation policy.

I also would ask that ARB begin and have greater attention to a discussion about the regions in the valley that are not currently planning to meet the targets.

Alternative planning strategies are an essential part of this process and ask COGs to answer certain questions.

When they can't meet the targets, what are the major challenges preventing them from meeting the targets and what would it take to meet the targets? I hope that ARB will help increase the public access to these conversations, because as we all heard last time and as the Board so wonderfully echoed, what this is really about is improving life for people and communities throughout the valley, including the half million residents in Merced and Madera Counties. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Magavern.

MR. MAGAVERN: Good morning. Bill Magavern with Coalition for Clean Air with a few brief comments.

I thought that you had an excellent discussion a couple months ago on this topic and that what emerged most

strongly from that was a recognition that there need to be changes in transportation and land use planning and that that is where the greenhouse gas emissions need to come from. That after all is what SB 375 is all about. And that's why when we see plans that assume that the targets will be met through increases in gas prices or a slow economy and we say, no, that that's not in compliance with SB 375. We need to have those action-oriented strategies that bring into compliance through changes in transportation and land use planning.

And so I think today we're continuing that discussion. And we urge you to continue to exercise close scrutiny over those parts of the plans and to make sure that the targets are being met, not through assumptions but through actual strategies.

Secondly, we urge you to pay close attention to environmental justice and social justice and tangibly I think that means, for example, making sure that these changes give greater access to public transit for transit-dependant communities.

An example I would say would be the bus rapid transit line that Fresno was planning and that we advocated for. And another example would be building affordable housing near transit. And I would note that in this year's budget, the Legislature and the Governor

decided to fund both of those priorities as part of the spending that comes from the AB 32 revenues that are coming in through the cap and trade program.

And finally, I'll note a connection between this item and your second agenda item because like the low carbon fuel standard, a successful implementation of SB 375 will reduce our dependence on oil. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Liz O'Donoghue.

MS. O'DONOGHUE: Good morning. I'm Liz O'Donoghue with the Nature Conservancy.

First, I want to thank the COGs for their work on the SCSs. It's a significantly difficult shift and work and focus to achieve our climate goals and achieve the critical co-benefits, including preserving and protecting important natural resources, farms, and ranches. And so I know it's really been a difficult time. So I want to thank the COGs for all the work they've been doing.

Second, I want to urge the Board really to look at and investigate how the targets are being met with the focus on land use and transportation strategies. I'm just echoing what others have said before me. There has been significant progress through this first round to achieve the vision that the public desires, the market demands, and to meet our climate goals. But more can be done.

If you read the SCSs not only in the San Joaquin Valley but really around the state, there's always a focus and a highlight on protecting co-benefits, including important conservation lands, farmlands, ranches, water, habitat. But when you actually dig into it, you try to take a look at what strategies are being promoted to protect that and to really engage that as part of a significant sustainable communities land use strategies. And there are often very thin. So what we struggle with is the talking points are very good and the messages are good. But when you dig into it, you really want to see tangible strategies that achieve those co-benefits.

So I urge the Board to continue its rigorous review to ensure that all MPOs meet their targets through land use and transportation strategies. I think the presentation this morning was really helpful and important. And I really look forward to continuing to work with you and staff on achieving the vision that SB 375 promotes. Thank you.

MS. WISE: Good morning. I'm Ella Wise from the Natural Resources Defense Council. Thank you for your time and ongoing work.

I want to thank ARB staff for responding to the Board's concerns voiced at the May 22nd meeting. We are grateful for the staff's rigorous assessment of modeling

methods.

We also want to thank Kern County for their effort to be as transparent as possible by originally releasing the Figure 4-7, which was thoroughly discussed at the last meeting, estimating how the targets were being achieved. And we want to congratulate the COGs on all the impressive hard work.

I do have a few concerns. Firstly, it seems that there are two parts to the determination of whether the emissions reductions in the plans being assessed are acceptable. The first question is are the models sensitive and their results accurate. For example, is it true that most of the emissions reductions in Kern County are from assumed fuel cost increases, not changes to transportation and land use as the plan states? ARB is doing an admirable job of getting to the bottom of this question about model sensitivity and accuracy of results.

However, there is a second part to assessing whether these plans achieve the targets. If the results are accurate and the targets are being achieved are the ways in which the targets being achieved acceptable? This requires clarification of the role of assumptions rather than action-oriented strategy as language of SB 375 calls for in achieving emissions targets.

For example, if it's true that the targets are

being achieved due to assumptions, not action-oriented strategies, is that okay? I understand that the model assumptions and strategies are interrelated and together effects travel patterns. But both MPOs and stakeholders need direct and definitive clarification about that relationship and the role of assumptions in achieving targets.

Both of these questions are not only important in upholding the integrity of the law and informing the MPOs next steps, but they have great implications on the discussion of target setting for the next round.

My second point is that the alternative planning strategies in the state are -- the first alternative planning strategies in the state are being developed and setting important precedent. We ask that ARB highlight and direct technical support to these planning efforts in Merced and Madera. And also as has been said, we want to reiterate that all of our efforts here are not ultimately about tinkering with models, but about mitigating climate change and helping communities achieve co-benefits of improved public health, greater accessibility. Thank you again for your work.

MS. GARIBAY: Good morning. My name is Veronica Garibay. I'm with the Leadership Counsel for Justice and Accountability based in Fresno. We have been engaged in

the SB 375 implementation process in primarily four of the MPO areas: Kern, Tulare, Fresno, and Merced.

We've been engaged since the COGs first started talking about whether or not they would meet the targets. That process started about three years ago. And since then, we have worked in coalition with many of the advocates who are here today, many of partners, but also in close partnership with community residents that stand to be impacted by land use and transportation policy in the future. We've engaged them every step of the way to make sure that they have a voice in the process and that this process actually benefits their communities in the long run.

First, I'd like to thank ARB for their tremendous amount of work and also the MPOs that are here today for the tremendous amount of work they have done. We witnessed it. We've been at every Committee hearing at every policy Board meeting in about five counties. That's a lot of work. So we recognize all of the efforts that have gone into this process.

As many of my colleagues have already mentioned and have asked you to do, we ask that you conduct a comprehensive and rigorous review of GHG reduction strategies in the SCSs themselves to make sure that they are legitimately meeting the targets and that we are doing

this through land use and transportation policy as SB 375 calls for.

As you know, the law requires that all the strategies be action oriented and pragmatic and what we ask is that you really look into in your review. And in addition to that, we also ask that when you're looking at the reduction strategies, that you make sure that some of them are not negatively impacting low income communities and environmental justice communities and that the benefits of actually meeting the targets reach all of the communities and all of the areas.

Earlier in the presentation, you talked about examples of some of the work that's already been done in the large metro areas like Stockton, Fresno, Bakersfield, and other areas, BRT, affordable housing, higher density housing is going in. We ask that you really think about what does this mean for Delano? What does this mean for Shafter? What does this mean for McFarland? What does this mean for Arvin? What does it mean for south Shafter, for LaMonte, for Greenfield, for Visalia, Tulare, all of these smaller cities that do not -- are not large metro areas. What does this really mean for them and making sure that land use and transportation policies also benefit those areas?

And again, we are working very closely right now

with the Merced County Association of Governments. Merced and Madera are preparing the first APSs in the state of California and we ask that you work closely with them and monitor that progress. Merced's draft RTP and EIR currently state that the APS does not have to be realistic. That's a problem. We ask that you really look at what they're doing.

Finally, I'd like to stress the importance of co-benefits. This isn't just about climate change and meeting the GHG reductions. This is good economic development. This is about public health. This is about closing the income disparities in our region. Thank you.

MR. CAMPOS: Good morning, Board. Cesar Campos.

I'm with Central California Environmental Justice Network.

I'm the coordinator.

We've been engaged in primarily Fresno and Kern Counties through this process. We want to thank CARB and the COGs have done a lot of work through this process. They mentioned earlier this is a very experimental process. That has been seen. The intent of SB 375 is really to incentivize forward thinking and coherent transportation and land use decisions. I really ask when you are scrutinizing -- and I really mean scrutinizing all of these plans that you sort of scrutinize and let the public know how much of the reductions, what portion of

the reduction is also and sole related to tangible land use and transportation planning. I think that's the first step.

And I didn't see this in the measures, but I think that one thing that the staff should focus on is to really create a measure that scrutinizes what strategies is presented to the Board, places disproportionate burden on low income, minority, and environmental justice communities. As you all know, it is illegal for CARB to accept and legitimize any strategies this yields an unfair burden on any minority population. And I'd really like to see that as a public member what kinds of strategies are actually doing that.

There's one in Kern County that talks about rising price of fuel. That is expected to yield, at least in my opinion, yield unfair burden on populations of low income that will not be able to keep up with those rising prices of gas.

I think within all of the COGs you should also try to find strategies that could be applied to each and every single COG. For example, in Fresno, we were able --we're successful in getting a strategy that gives grants to low income jurisdictions and to smaller jurisdictions that they can even use to apply for and conceptualize projects. That is something that I think should be asked

of all COGs because it really gets down to all of the little small towns that my colleague mentioned prior.

Finally, as you are considering updating these targets, I really hope that you take into account the scrutinized versions of the targets that the COGs are actually meeting with land use and transportation planning and to use those numbers as a base line for moving forward with the targets.

As I mentioned before, this has been a very experimental process. And we'd really like to see what we learn from this first round applied in further rounds to come. Thank you.

BOARD MEMBER DE LA TORRE: Thank you.

With that, we'll close the public comment.

My colleagues have any thoughts? I'll start over here on my left. John.

BOARD MEMBER GIOIA: Thank you, Mr. Acting Chair.

Thanks for the presentation. As one who is involved with the SCS development in the San Francisco Bay Area, I know how challenging it is to bring together so many stakeholder groups and try to come up with a plan. There's always a lot of controversy, a lot of balance.

The one thing that strikes me, it's unclear to me -- I didn't see the identified GHG reduction that occurs. I know each region came up with goals. And could

you just briefly itemize what those are by region, what the GHG reduction targets are associated with each of these SCSs?

2.4

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: I can answer that. For each of
the individual MPOs, there are eight -- they have
greenhouse gas reduction targets of five percent per
capita reduction by 2020 and ten percent per capita
reduction by 2035.

BOARD MEMBER GIOIA: How does that compare with other regions around the state?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: For the four largest MPOs in the state of California, that includes SANBAG, SCAG, SACOG, and Bay Area. Their targets were -- I'm just giving you a range here. For 2020, it was in the range of seven to nine percent reduction. And for 2035, it was in the 13 to 15, 16 percent range.

BOARD MEMBER GIOIA: Right. That's one of the issues I know each region has certainly defined this differently. And also frankly a lot of the population growth will be occurring in the Central Valley, many of these communities.

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: If you'd like me to respond to

that.

In the main presentation, we will talk about the proportion of the state's population that exists in the San Joaquin Valley now. And what it's projected to be in the future. I think right now the San Joaquin Valley population as a group of eight counties is about ten, eleven percent of the state's population. And by 2035, it's projected to represent about 15 percent of the state's total population.

BOARD MEMBER GIOIA: I know different regions identify various other major goals. How did the issue of co-benefits -- there's detailed here get identified as a priority in these particular plans?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: In the San Joaquin Valley SCSs,
they recognize and discuss the issue of air quality and
public health in their SCSs. That's one of the areas
where they're hoping that the SCS strategies will make
some improvements in that area of public health.

But also in the San Joaquin Valley, all of them recognize the importance of agriculture, the agricultural industry, agricultural land being a very valuable resource. So many of the San Joaquin Valley MPOs, preservation of agricultural land was a big motivator in establishing some of these land use policies to keep

growth of their communities more compact.

BOARD MEMBER GIOIA: Without seeing the specifics in the plans, what's the view about how effective implementation of these plans will be in terms of really carrying them out. And ultimately it involves changing general plans of local cities and county, which of course is the next step. And what are you seeing with regard to the ability to implement how and what action cities and counties are taking?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: As with new MPO and any SCS, it
really does depend on public support for the plan and very
close collaboration between the MPO and the cities and
counties as they develop a plan to ensure that what goes
into the SCS is something that the local governments
aren't able and willing to implement. But it really does
come down to local land use decisions because the MPOs
cannot force a city or county to follow these policies.

But I would like to say that for some of the MPOs, as we've gotten a better understanding of their SCS development process, we know that they sat down with individual city and county staffs to look at their general plans and talk about where could you move in the future. Where could this land use policy at the local level -- where could it move in the future? And the regional SCSs

reflected those long-term views of the cities.

BOARD MEMBER GIOIA: I note in the San Francisco
Bay Area, there is an attempt to try to link some regional
funding transportation funding to implementation of the
plan by jurisdictions to try to incentivize the
implementation. Is that part of the plan here in the San
Joaquin Valley? Is there an attempt to try to link
regional transportation funding to jurisdictions that, for
example, accommodate particular types of growth?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: On the issue of funding
incentives, it really is a matter of resources available
to the MPO and to the region.

In the San Francisco Bay Area, there are sources of funding that are available in the Bay Area that are not available in the San Joaquin Valley to create those pots of incentive money. However, through the types of projects, transportation and active transportation projects that are programmed in the SCS, that sets those projects up for, if you will, sort of priority in getting the funding that comes to the MPO.

BOARD MEMBER GIOIA: Thanks. My general feeling on all this is it really does take incentive funding to get jurisdictions to move in this direction, just having a plan in and of itself, having been in Association of Bay

Area governments for 15 years, it's just that's just the way it works. And even then, it's hard.

So for me what would be useful as we go through this is we see as this moves forward how this linkage occurs. I think one way is to the extent that MPOs get cap and trade revenue, that can be linked. Have they had any discussion about how to spend potential cap and trade revenue that the region may receive? Because that's a perfect opportunity to link this. If not, they're not really -- it seems to me -- as effective or serious in trying to figure out how to implement it.

SUSTAINABLE COMMUNITIES POLICY AND PLANNING SECTION MANAGER ROBERTS: Those discussions are just beginning with the Strategic Growth Council on how to allocate the --

BOARD MEMBER GIOIA: I get that. No, that I understand.

What the Bay Area did was say to the extent we receive cap and trade revenue and there were certain assumptions -- and I think the assumptions were probably high about how much cap and trade revenue the region would get. But to the extent they receive cap and trade revenue, it would go to particular strategies to help implement the plan. Did that discussion occur in any of these SCS development plans?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: I personally am not aware of
those sorts of discussions having taken place. That's not
to say they have not.

BOARD MEMBER GIOIA: It seems to me that's a perfect -- of course, that's the discussion that the Strategic Growth Council, you're right, may have that discussion and could actually link the funding to particular strategies that ultimately achieve implementation of the plan and associated reduction in GHGs. Right. So even if the region didn't on its own talk about it, the Strategic Growth Council could link back. It seems to me that's really important.

CHAIRPERSON NICHOLS: Next.

2.4

BOARD MEMBER SERNA: So like Supervisor Gioia, I, too, was very involved in the Sacramento region's SCS, the development of that. And at the same time, general plan update in the county of Sacramento. So I think I understand quite a bit about the relationships between certainly the exercise of local land use authority and the SCS and how that indirectly or directly may influence hopefully local jurisdiction's perspective on land use planning and transportation and linking them more closely.

After hearing the testimony and certainly recalling the last time this Board heard from the San

Joaquin MPOs and some of the challenges -- the continuing challenges they face in terms of the modeling, it occurs to me that are we taking advantage or promoting the exchange of information, lessons learned from those MPOs that have already concluded their SCS work, the sharing of different modeling techniques? And are we doing that here at ARB or are we promoting it from this agency? Are we working through OPR? Are we working through CalCOG to make that happen? What is the condition of the attempt to not reinvent in wheel?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: There is that kind of effort
going on at many different levels. I would say one of the
benefits of SB 375 has been that broad dialogue across
MPOs to share best practices, to share lessons and to
mentor and help each other actually.

There is a group hosted by CalCOG. It's MPO State Agency Working Group. ARB participates in that. And there was a subcommittee of that group, which is the technical modelers. So the meetings of the subcommittee of modelers really is an opportunity for modeling staffs from all of the MPOs to get together, share their experiences, share best practices, and work together as a group.

We also know that on a one-to-one basis the

modelers in the San Joaquin Valley are talking to the modelers in the Bay Area, as well as SCAG region. Kern and SCAG share a boundary. So there is discussion among the staffs of those two MPOs and there is discussion. There is a sharing of information.

2.4

BOARD MEMBER SERNA: Good. That's good to hear.

To the extent that we can continue to help promote that I think it's in our best interest.

CHAIRPERSON NICHOLS: Thank you.

Any other comments? Yes, Ms. Mitchell.

BOARD MEMBER MITCHELL: Thank you. Like Supervisor Serna and Gioia, I also have the experience of sitting on the regional council for SCAG and working on the MPO for that region. And it's a daunting task. I congratulate all of the people that have worked on it, because it is difficult and congratulate Ms. Roberts on the work that she's doing because it is challenging.

One reason it's challenging is because it's new. It's new to all of us. And each region is different from another region. And in the San Joaquin Valley, you have eight separate MPOs. And we're working together to try to have a plan that works for that whole region. So I think your challenges are significant.

I know in the SCAG Regional Council that the people that sit on that council are supervisors and local

elected officials. And when SB 375 was developed, in my opinion, that was significant because each of them represent the planning agencies of the local agency that they sit on. And they are responsible for bringing the overall plan of the SCS to their local agency to begin implementation. So those concerns about whether there will be a reality to the plans that are being developed in my opinion go through that process. There is representation in every MPO for the local agencies that have to do the implementation. And for those who have concerns about that, you need to reach out to both local elected because they are the ones that are in the end responsible for implementing what is planned.

I also want to mention that the Strategic Growth Council at a conference that I attended a week ago announced that they will be developing -- how would I say this -- models for general plans. And one of the challenges I think for local agencies is updating your general plans. Most of these local agencies don't have money to do it. And yet, this is going to be necessary in implementing the strategic growth plan that is developed through the MPO. So I urge local agencies to look into that. And that's coming up. There will be money available for updating general plans, and there will be model plans developed by the Strategic Growth Council that

local agencies can look to as a starting point.

So I think the communication again is one of the key things here. There has to be good communication between all the stakeholders, the local elected officials, the technical staff, the planning staffs to get this job accomplished. And I think you've made significant progress.

In the valley, I really like to see revitalization of the downtown areas in all these cities, a focus on infill, and then preservation of the ag land rather than development that is sprawling out into your ag land. To condense that closer to the footprint of the city is really key to having a plan that I think carries out the intent of SB 375, which is to link where people live with where they work so that they aren't traveling long distances and we can reduce vehicles miles traveled.

Also I think it's good we've seen the emphasis on transit on money going into public transportation. That's key as well as to reduce vehicles miles traveled and get people from where they live to where they work.

So I look forward to seeing all of you back here again in October whenever to give us the latest updates. But congratulations on hard work. And I urge you to continue working and communicating on what is being developed. Thank you.

CHAIRPERSON NICHOLS: Thanks.

Dr. Sperling.

BOARD MEMBER SPERLING: So I would also like to acknowledge that it does look like there is good progress being made, both by the COGs as well as by ARB in several fronts here. So I'm pleased to see that. I'm disappointed we're not hearing from the COGs or any of the local decision makers, which kind of makes me a little apprehensive perhaps about the process. Maybe there is a good explanation for it.

But let me give a little preamble here, and then I have some important points I want to make. And that first of all, just to summarize, kind of articulate, what a few people have been saying is that this SB 375 is the sustainable communities and Climate Protection Act. And I think that most of us that actually look at this carefully, we understand as well as of course the local communities that the greenhouse gas reduction is not the top priority for these communities.

But what we've also come to appreciate -- and I think this really happened in the SCAG area where it was really eye-opening experience that we had in early years of this -- is that the strategies to achieve these climate goals are almost exactly the same strategies that one would pursue for a whole realm of other goals that are

important to the local communities: Reducing infrastructure cost, improving access for everyone, including low income people, affordable housing, preservation of ag land and so on.

So why I've become so committed to understanding and supporting SB 375 is that it provides a framework for communities and regions to do what they want to do anyway. And that's what happened at SCAG. When we started at SCAG, you know, the Board there was -- I would characterize ranged anywhere from ambivalent to hostile to this whole process.

But after a couple years, you know a year or two with a lot of outreach by the COG -- by the SCAG staff there we played a really important role in talking to the local decision makers, talking to the politicians they came to appreciate what I just said, that this really is what they want to do anyway and it supports them in those goals.

So the goal is good planning, good investments, good decision making. And the goal is not good studies. So that's another point I want to emphasize. A few people have kind of referred so they want to see actionable -- real actions. And I do want to caution though that as we -- like some of us like to say is if you can't measure it, you can't manage it. So these models and these

analysis are important because they are what we need to develop the metrics to measure progress and so on.

And so in the end, it is providing a framework.

And as Supervisor Gioia said earlier, the real goal here probably from the -- or one of the important parts of this process is that 375 provides that framework for attracting more money for creating incentives, because that's how this is going to happen. Sticks are not going to work.

Local communities don't have the funds. But carrots will work. So the cap and trade revenues are one thing.

Also going forward is restructuring some of the transportation formulas. We now have a good mole in Caltrans that can maybe help us that we learned about yesterday. One of our staff moved over to Caltrans to head up their sustainability efforts. But I think everyone is starting to think along those lines. I'm encouraged. It's thinking about creating the funding to do what's good for the communities. So now that was just kind of preamble summarizing.

But there is one thing that really concerns me, even disturbs me about everything I've hear heard here from the ARB staff and even from the NGOs. And that is this strong focus on transit. Transit is good. But we are talking about communities that have relatively low density, even cities like Fresno. If you put

conventional -- and I'll say conventional transit, if you invest your money in conventional transit, it's going to be hugely expensive. It's going to get relatively small benefits.

Times have changed. We need a much more innovative approach to moving people. And conventional transit is very -- has very limited potential for achieving these goals that we're talking about and in a very expensive way. We need much more creative thinking about innovative mobility solutions. So even -- so back up. BRT, that really made me nervous, because BRT is really intended for high density travel corridors. If you start putting money -- rail transit, of course, makes the least sense in these metropolitan areas. But BRT is not necessarily -- at least conventional BRT is not necessarily a very effective strategy either.

And it certainly -- transit is part of it. I don't want to be dissing transit completely. Conventional transit plays some role. But we need much more innovative approaches. So we have -- so there is all kinds of companies starting to arise now that are doing different kinds of carpooling services that there's services that you probably heard of Uber and Lift and Sidecar. There is a number of others. And they started out being kind of taxi type services, but they're expanding beyond that.

And in fact, these kinds of services might be far more effective in these local communities than anything we're going to -- certainly than the same amount of money you would put into transit.

So we have these kinds of innovative services. You have bike sharing. We have small vehicles could be used in a lot of these communities. And so there is a lot of planning, thinking, incentives that can be used to provide access to lower income people, all people, but including lower income people that will be much cheaper than owning a car and much cheaper even than the community putting a lot of money into transit.

And one idea might be just looking at some of these companies and saying, you know, maybe we should do some small amount of subsidies, do an RFP for some of these companies that they can provide these services at a low cost. And so I just want to emphasize. So I heard all these things about high quality transit and transit and so on and so I just really, really encourage them.

So one example I would give people look at -- my home town of Davis, people look at it it's got all this bicycle use. It didn't just happen spontaneously. It happened over a period of time. It used to be Davis was a car city also. But over time, there was a lot of focus on building. First, it was little bike lanes. And then they

gradually built up a whole network. These are communities where biking and so-called active transit transportation makes huge sense. And there is a lot of opportunities to do that. And I would make say that should be a much higher priority.

As a last note, I'm associated with the National Center on Sustainable Transportation headquartered out of U.C. Davis. And I would volunteer them to the COGs and the local governments to help with some of these innovative ideas and to think about how this might happen. And so I'm not quite sure how to operationalize that offer. But you know, we've -- some of the staff have helped with some of the modeling. I'm talking not about the modeling, but actually thinking through what are these creative options. I know some of the NGOs -- NRDC is starting to get very involved in thinking about these kinds of innovative mobility solutions also. So I think there can be help from some of the NGOs as well.

CHAIRPERSON NICHOLS: Having visited your shop out there in Davis, I would say you could start off by inviting people to come by. Maybe give them a cup of coffee and have a conversation. That would be great.

BOARD MEMBER SPERLING: I will. We will set up some kind of workshop or some kind of discussion specifically for the valley MPOs and local decision

makers, if you're interested.

CHAIRPERSON NICHOLS: I don't think people are compelled to attend. I think that's a great offer. It's not a Board resolution. No action is being taken here officially today.

Are there other Board members who wanted to comment on this item before we draw it to a close?

I apologize I had to step out of the room for a few minutes. But there was one thing I thought -- I think it really builds on Dan Sperling's comment on what I heard from the community people who came today to testify on the NGOs who have been working so hard on this. That was a suggestion that we needed to look closely at the assumptions that are going into these plans and that we had to be very clear that only strategies that in some sense required or mandated land use and transportation investments and plans would be acceptable under SB 375.

I just wanted to comment that all of the plans that we've looked at have assumptions in them about what is happening in the market. And it would be foolish not to take advantage of changes that are happening in people's attitudes about where they want to live and how they want to get around and not to say that we should simply accept any assertion that's made simply because it's on a piece of paper. But I think there is a lot of

information out there about demographic trends, about employment trends, education trends and all of that, which we should take advantage of. And if it's working in the direction of more sustainable communities, indeed, we should be building on that and supporting it. So I wanted to make sure that didn't just go unresponded to.

I would agree that probably relying on rising gas prices to change behavior is not a very good strategy, if that is, in fact, a strategy. But people's attitudes about how much they want to spend on gas versus other things is a legitimate strategy I think. So with that --

BOARD MEMBER GIOIA: Just a question without sort of getting into the whole aspects of high speed rail. I mean, there are clearly many who believe that effectively implementing high speed rail could result in changed development patterns in the Central Valley in ways that could be beneficial. So has that issue come up? In other words, having development occur clearly much more high density development around rail stations. Did that come up in any of the discussions? Without commenting one way or the other about high speed rail, is that development patterns change dramatically, which is sort of what happened in Taiwan with their high speed rail project from the north to south part of the island about development around these stations.

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: Several of the Valley MPOs do
have high speed rail stations planned in them. And their
RTP SCSs do acknowledge that. There are some investments
being made at some of these stations to actually build the
station and enhance the station so it is ready for high
speed rail when it comes.

BOARD MEMBER GIOIA: But to the extent if high speed rail does happen, have they planned out development -- focusing development around the rail station? High density development job centers, residential development around the rail stations?

SUSTAINABLE COMMUNITIES POLICY AND PLANNING
SECTION MANAGER ROBERTS: That is one of the things that's acknowledged in these SCSs. But as I said, they're only some stations, Bakersfield, Fresno, not every MPO county is going to get --

BOARD MEMBER GIOIA: But to the extent in those areas they've -- this is part of the strategy, having high density around those rail stations.

SUSTAINABLE COMMUNITIES POLICY AND PLANNING SECTION MANAGER ROBERTS: Yes. Yes.

CHAIRPERSON NICHOLS: Thank you very much. It was an excellent report and really is encouraging. We're looking forward to the next chapter. Thanks everybody.

We'll take a very short break to shift the cast of personnel here as we move from sustainable communities to low carbon fuels.

(Whereupon a recess was taken.)

CHAIRPERSON NICHOLS: The last item for this meeting is an informational update on the proposed re-adoption of the low carbon fuel standard, which the Board expects to hear at a future Board meeting. I've asked staff to provide this presentation to help us all better understand the current status of the low carbon fuel standard.

Again, this is an informational item intended for the Board's benefit. It's not intended as a way of soliciting comment as part of the formal 45-day comment period for the low carbon fuel standard re-adoption rule making because this hasn't occurred and obviously we will be soliciting and relying on stakeholder comment as we go through that process. But for the moment, we're just getting an update on where we are with implementation.

Mr. Corey, will you please introduce this item?

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

As background, the low carbon fuel standard regulation is intended to reduce the carbon intensity of transportation fuels used in California by at least ten

percent by 2020. Reducing carbon intensity will reduce greenhouse gas emissions and support the development of cleaner fuels with the intent of co-benefits.

Low carbon fuel standard is a key part of a comprehensive set of programs in California to reduce GHG emissions from transportation by improving vehicle technology, reducing fuel consumption, and increasing transportation mobility options.

The Board approved the low carbon fuel standard regulation in April 2009 and amendments to the regulation in 2011. So it's been nearly five years since the Board's original action. And the core principles of the low carbon fuel standard regulation remain valid.

The basic framework of the current low carbon fuel standard, includes the use of life cycle analysis, the low carbon fuel standard credit market, and the low carbon fuel standard reporting tool, among other aspects all of which are working.

In response to State Appeals Court decision regarding procedural issues associated with the original adoption, staff will propose that the Board readopt the low carbon fuel standard regulation in the January 25 Board hearing. Additionally, staff is developing a suite of amendments to provide a stronger signal for investments in and production of the cleanest fuels, offer additional

flexibility, update critical technical information, and provide for improved efficiency and enforcement.

2.4

Staff has already conducted eight public workshops this year and numerous meetings and discussions with regulated and interested parties to help develop these amendments. And staff will continue to work with stakeholders as we develop the recommendations for the Board.

And with that, I'll ask Katrina Sideco to give the staff presentation. Katrina.

(Thereupon an overhead presentation was presented as follows.)

AIR RESOURCES ENGINEER SIDECO: Thank you, Mr. Corey.

Good morning, Chairman Nichols and members of the Board. We are pleased to have this opportunity to provide an informational briefing today on the low carbon fuel standard, or LCFS.

--000--

AIR RESOURCES ENGINEER SIDECO: In today's presentation, we will first provide a brief history of the LCFS, including its original adoption, why it was established, and its basic requirements. Then we will discuss the current status of the LCFS before describing the proposed re-adoption and likely amendments. We then

conclude with a proposed time line for this rulemaking.

--000--

2.4

AIR RESOURCES ENGINEER SIDECO: The Board approved the LCFS regulation in 2009 to reduce the carbon intensity, or CI, of the transportation fuel used in California by at least ten percent by 2020 from a 2010 base line. CI is a measure of the greenhouse gas or GHG emissions associated with the various production, distribution, and consumption steps in the life cycle of a transportation fuel. The LCFS is one of the key AB 32 measures to reduce greenhouse gas emissions in California.

The LCFS also has other significant benefits that are sometimes overlooked. It transforms and diversifies the fuel pool in California and reduces petroleum dependency, which are two state priorities that precede the LCFS.

--000--

AIR RESOURCES ENGINEER SIDECO: The LCFS is designed to reduce GHG emissions in the transportation sector, which is responsible for about 40 percent of greenhouse gas emissions, 80 percent of ozone-forming gas emissions, and over 95 percent of diesel particulate matter.

The LCFS is a key part of a comprehensive set of programs in California to reduce emissions from the

transportation sector, including the cap and trade program, advanced clean car program, and SB 375. In the cap and trade program, fuel providers have a compliance obligation for the greenhouse gas emissions that result from the production and use of fuels. Therefore, it is an incentive to increase the efficiency in the production of fuels and to develop fuels with lower greenhouse gas emissions.

The advanced clean car program encourages more efficient vehicles and reduces gasoline use. SB 375 encourages land use planning for pedestrian and bicycle friendly communities to reduce vehicle miles driven.

--000--

AIR RESOURCES ENGINEER SIDECO: I would like to spend a little more time describing how the LCFS works cohesively with the cap and trade program. As you are aware, the cap and trade program will expand to cover transportation fuels starting in 2015.

The cap and trade program provides a hard limit on economy-wide greenhouse gas emissions, but provides compliance flexibility, seeking the most cost effective measures to reduce greenhouse gas emissions. Including fuels under the cap ensures that all sectors, including transportation, which is the largest source of greenhouse gas emissions, are treated equitably in meeting

cost-effective solutions. In this manner, all sources of greenhouse gas emissions are accounted for and have incentives to reduce emissions.

However, to achieve our long-term greenhouse gas and air quality goals, it will be necessary to achieve major reductions directly from the transportation sector. And that transformation to these low carbon fuels need to start today.

The LCFS drives investments in clean, low carbon, renewable fuels that reduce greenhouse gas emissions and diversify the sources of transportation fuel for Californians. These clean fuels count toward compliance with both the LCFS and cap and trade.

As a result of these two programs, in addition to our cleaner car programs and regional planning for more sustainable communities, the cost of driving in California by 2020 is projected to drop by \$400 per person each year compared to 2012.

--000--

AIR RESOURCES ENGINEER SIDECO: Now I want to briefly touch on how the LCFS works. The LCFS has a couple of key requirements. It sets annual carbon intensity standards which reduce over time for gasoline, diesel, and the fuels that replace them. Carbon intensity is expressed in grams of carbon dioxide equivalent per

megajoule of energy provided by that fuel. CI takes into account the greenhouse gas emissions associated with all of the steps of producing, transporting, and consuming a fuel, also known as a complete life cycle of that fuel. The LCFS is fuel neutral and lets the market decide how best to comply.

--000--

AIR RESOURCES ENGINEER SIDECO: The LCFS primarily affect providers of petroleum fuels and biofuels in California. These are the regulated parties. In-state fuel producers and out-of-state fuel importers are usually the regulated parties, unless they pass that obligation downstream.

Some fuels already meet the 2020 CI targets and are therefore exempt from the LCFS. Providers of these low CI fuels are voluntarily opting into the LCFS program and generating credits. These credits can be bought and sold by regulated parties for compliance purposes, either now or in the future.

--000--

AIR RESOURCES ENGINEER SIDECO: The LCFS accounting system is pretty straight forward. Fuels and fuel blend stocks introduced into the California fuel system that have a CI higher than the applicable standard generate deficits. Similarly, fuels and fuel blend stocks

with CIs below the standard generate credits.

Compliance is achieved when a regulated party's deficits are offset by its credits. The current compliance curves are back loaded to allow time for the development of low CI fuels and advanced vehicles.

--000--

AIR RESOURCES ENGINEER SIDECO: Since the regulation went into effect, regulated parties have successfully operated under the LCFS program. The LCFS is working as designed and intended. This figure shows the total credits and deficits reported by regulated parties through the first four quarters of the last three years and the first quarter of this year.

Regulated parties in the aggregate have over complied with the LCFS standards in every quarter since implementation. Cumulatively, through the end of the first quarter of this year, there have been a total of 3.1 million excess credits that can be used for future compliance. These credits do not expire. For reference, one credit equals one metric ton of carbon dioxide equivalents.

--000--

AIR RESOURCES ENGINEER SIDECO: Credits so far have been generated primarily from low CI ethanol, but also from biodiesel, renewable diesel, and natural gas.

There is some electricity in there, but it's currently that's than two percent. There is not yet any hydrogen generating credits. However, we expect LCFS credits from both electricity and hydrogen to significantly increase as electric and fuel cell vehicles continue to come into the California market in larger numbers.

I would also like to highlight the major contribution of renewable diesel at 14 percent of the credits. Interestingly, only one company is responsible for the vast majority of these credits demonstrating the opportunity for growth and the ability of the LCFS to pull low carbon fuels to California, even at these early stages. As the LCFS becomes more stringent, we expect the pull of the LCFS program to increase and volumes of renewable diesel and other low carbon fuels to grow.

--000--

AIR RESOURCES ENGINEER SIDECO: Regarding the LCFS credit market, only regulated parties are allowed to participate in the market. No third parties can hold credits, making it a closed system. We have a robust credit market, with 81 entities buying and selling LCFS credits and 345 credit transactions recorded through the second quarter of 2014.

LCFS credit prices have varied, starting at ten

to \$15 per credit in 2012, rising to \$85, but declining more recently as our compliance curves have been temporarily frozen in place by the court, which brings me to our next topic.

--000--

AIR RESOURCES ENGINEER SIDECO: The LCFS has two lawsuits, one federal and one state. The federal lawsuit claimed that the LCFS violated the commerce clause by favoring ethanol and crude oil from California, and the district court agreed. But the 9th Circuit Court of Appeals reversed the district court's opinion that the LCFS violated the commerce clause in certain respects and sent other issues back to the district court for further proceedings. The plaintiffs appealed to the US Supreme Court, but their request for review of the case was denied.

In the state lawsuit, the State 5th District Court of Appeal found procedural issues with the California Environmental Quality Act, or CEQA, and the Administrative Procedures Act. The court rejected the plaintiff's request to invalidate the LCFS, thereby allowing ARB to enforce the program at 2013 CI levels while addressing the court's concerns. To address the ruling and provide lasting market certainty, ARB staff will propose in early 2015 that the Board re-adopt the

LCFS regulation and adopt the alternative diesel fuel regulation that involves biodiesel.

--000--

AIR RESOURCES ENGINEER SIDECO: I would like to discuss in a little more in detail the nexus between biodiesel and the LCFS. We acknowledged in 2009 during the original LCFS rule making the need to investigate and address potential NOx impacts of biodiesel.

The court ruled that we had not yet completed that analysis and made necessary findings regarding NOx impacts and mitigation. Therefore, we had not yet met CEQA requirements.

To the extent that the LCFS encourages biodiesel use, staff will propose measurements to mitigate any significant NOx impacts from that biodiesel use as required by CEQA. These measures will be part of a separate but linked alternative diesel fuel or ADF regulation.

--000--

AIR RESOURCES ENGINEER SIDECO: ARB and many others have been studying the NOx impacts associated with biodiesel use for many years. Initial data suggested that biodiesel blends at five percent biodiesel or B5 and even greater may not result in a NOx impact. However, recent data shows that there is a NOx impact at B5 for certain

vehicles and with certain feedstocks. In light of these new data, staff is evaluating necessary options to ensure that NOx emissions do not increase.

Staff will propose the ADF regulation to the Board during the same month as the hearing to consider readoption of the LCFS.

--000--

AIR RESOURCES ENGINEER SIDECO: I want to draw an important distinction between bio dose all and renewable diesel. The terms biodiesel and renewable diesel are frequently used interchangeably. However, they are distinct products.

Biodiesel and renewable diesel are both derived from animal fats and vegetable oils. Biodiesel contains oxygen molecules in the form of esters and can be produced economically on a relatively small scale. Consequently, there are over 100 plants in the United States, including about a dozen in California. Renewable diesel is chemically undistinguishable from conventional diesel and it involves a process called hydro-treating, a common refinery process that can only be produced economically on a large scale. At this time, there are only a handful of renewable diesel plants in the world.

Importantly, biodiesel and renewable diesel also differ in their tailpipe emissions. Both fuels provide

reduction of toxic diesel PM as well as hydrocarbons and carbon monoxide. However, biodiesel can increase NOx, whereas renewable diesel decreases NOx.

Incidentally, renewable diesel is one of the proposed mitigation strategies being considered to offset biodiesel NOx increases. As I mentioned before, renewable diesel will now account for 14 percent of the total credits generated, and we see greater volumes of this low carbon fuel coming to California in response to the LCFS.

--000--

AIR RESOURCES ENGINEER SIDECO: I hope that the relationship between the LCFS, biodiesel use, and the ADF is a little more clear.

I would like to now return the focus to the just the LCFS. Although implementation of the LCFS has gone smoothly, there are opportunities to improve the regulation. Staff is developing a package of proposed amendments to improve the LCFS. There are several factors driving the staff's proposed amendments. First, based on stakeholder comments received in both the original 2009 rulemaking and 2011 amendments, the Board directed staff to consider revisions to the regulation in specific areas.

Additionally, staff has received feedback from regulated parties and other stakeholders throughout the implementation of the LCFS, to which staff has been

responsive.

Staff also identified proposed revisions for clarity and enhancements of the regulation, part of a larger effort to propose revisions based on our own four years of implementation of the LCFS. How can the LCFS be improved from a staff resources standpoint?

--000--

AIR RESOURCES ENGINEER SIDECO: It's been nearly five years since the Board's original adoption and the core principles and policies of the LCFS regulation remain valid. The basic framework of the current LCFS is working and staff will recommend it be carried forward.

Among the damage of amendments being prepared by staff are proposals to revise the post 2015 compliance curves and to include a cost containment mechanism.

Staff is also proposing to amend the crude and refinery provisions by amending some crude oil provisions, recognizing GHG reductions at the refineries and addressing low complexity, low energy use refineries, which are the small simple refineries that are fundamentally different from the larger more complex ones.

--000--

AIR RESOURCES ENGINEER SIDECO: Staff is proposing to improve the enforceability of the program by streamlining fuel pathway analyses and enhancing and

clarifying the enforcement provisions.

Finally, staff is proposing to update indirect land use change values and recognize additional electricity credits, including mass transit and fork lifts.

--000--

AIR RESOURCES ENGINEER SIDECO: There has been an exciting development since we last addressed the Board, which is the Pacific Coast Action Plan, a regional agreement between California, Oregon, Washington, and British Columbia to strategically align policies to reduce greenhouse gases and promote clean energy.

One of the provisions of the action plan explicitly addresses the low carbon fuel standard programs. Oregon and Washington have committed to adopting LCFS programs, while California and British Columbia have committed to keeping their LCFS programs.

Staff has been routinely working with these jurisdictions, providing assistance where we can. Over time, these LCFS programs will build an integrated west coast market for low carbon fuels that will create greater market pull, increase confidence for investors of low carbon alternative fuels, and synergistic implementation of implementation and enforcement programs.

--000--

AIR RESOURCES ENGINEER SIDECO: Finally, I would like to discuss the proposed time line for the LCFS rulemaking. Staff conducted an initial public workshop to discuss the proposed readoption on March 11th of this year.

After the initial workshop, eight other workshops followed, both topic specific and LCFS program overviews. Staff has also convened the LCFS Advisory Panel, which comprises of a group of over 40 experts representing many aspects of the LCFS program to provide feedback to the ARB staff on our current progress and planned progress.

Additional workshops will continue through the rulemaking process as well as an additional meeting of the LCFS Advisory Panel. The first Board hearing on the proposed LCFS readoption and ADF adoption is scheduled four January of 2015, with a second Board hearing tentatively in the summer of 2015.

Should the Board readopt the LCFS with proposed revisions, the implementation of the improved LCFS will begin January 1st, 2016.

This concludes my presentation. And we thank you again for the opportunity to provide an update on the low carbon fuel standard. We would be happy to take any questions.

CHAIRPERSON SAWYER: Thank you. That was a very

comprehensive presentation of a big topic.

We do have 14 witnesses who signed up so far covering an array of different stakeholders. I think we should just hear from them first. We'll start with Catholic Charities of Stockton.

MS. ROEDNER SUTTER: Hello. Thank you again for the opportunity to speak. Hi name is Katelyn Roedner Sutter, the Environmental Justice Program Director at Catholic Charities in the Diocese of Stockton.

And I just wanted to briefly share with you why we support the low carbon fuel standard. First, as a faith organization, we see the LCFS as a tangible practical large scale way we can be good stewards of God's creation. The LCFS limits our carbon footprint, which is linked to calamitous effects on our environment. Locally, we are seeing this manifest itself in hotter temperatures, less rainfall, and concerning changes in our delta ecosystem.

Just as urgent for the geography of the Stockton Diocese, we see the poor air quality that is causing asthma, heart disease, lung disease, and other respiratory ailments. By cleaning up our emissions and limiting our consumption of dirty energy, we are improving our air quality and the health of all of our residents. The LCFS is helping us be good stewards of creation, while

improving health outcomes for all people.

Our stewardship also has important implications for future generations who will eventually breathe the results of our behavior now.

Additionally, as we have the concern for justice in all matters, we are deeply troubled these health impacts I've listed disproportionately harm people who are poor and vulnerable in our communities. This includes children, older adults, and those who live in neighborhoods next to highways and transportation and shipping hubs, which certainly describes the city of Stockton.

Of course, those neighborhoods are often largely people of color and low income households. All of this is to say that those among us who can least tolerate the health impacts of our dependence on oil are the ones bearing the heaviest burden. They are literally living, breathing, and dying the outcomes of our dirty energy, yet often do the least to contribute to our poor air quality. The LCFS is helping to improve our air quality for the benefit of all of our residents.

Finally, we in Stockton are already seeing the tangible economic benefits of the LCFS. Right at the port of Stockton is Community Fuels, an advanced biorefinery that is employing local talent and is expanding as we

speak.

Last year, I was fortunate enough to take a tour of this facility, which took me back to college chemistry class, but also impressed upon me the real local economic benefits of this clean and growing industry. Like many cities in California, Stockton has fallen on some hard times. But investments from companies like Community Fuels will be part of the city's come-back. I believe Stockton is real proof that the LCFS is helping our environment and our economy.

Thank you very much for your time and all of the work you have done and continue to do on the LCFS.

CHAIRPERSON NICHOLS: Thank you.

Ms. Reheis-Boyd.

MS. REHEIS-BOYD: Good morning, Chairman Nichols and members of the Board.

Cathy Reheis-Boyd, President, Western States

Petroleum Association. Good to see you all again. It's
been a while.

I do appreciate the staff's perspective they've shared today. We are four years in implementation into the low carbon fuel standards. So I think it's a good time to really assess where we are on our objectives, our targets, our mechanisms and our timing. Because we really do know a lot more now than we did four years ago. And

things have really evolved. And the data is coming very quickly and it's good for us to really pause and work together to look at that.

We still are challenged with trying to figure out how to meet 10 percent by 2020. The current data still points to its just too much too fast, given what we know.

Certainly, we have submitted some BCG analysis. I think the Board Clerk has distributed that to you. We will have an update very quickly on that. We've been working extremely well with staff. Thank you, Richard, for pulling together the conversations we've been having with BSG and the CARB staff. There's lot of information to share. A lot of things have evolved.

Dr. Sperling has even mentioned today there's some transitional things we calook at. We'd like to get that in the analysis as well. So all of that has been very, very helpful. My view is the closer we get on assumptions, obviously we aren't in total agreement, no surprise, Richard. But hopefully we're getting closer. We all appreciate Mike Waugh's new term, giddyup. I don't know if you've heard that yet. But he can define that for you when you ask him some questions.

But we really are concerned about still the costs and how to mitigate those. And we worked with you through the cap and trade program on the stationary source side.

And we want to do that here as well. As we go into the slope of the curve and the timing of the curve between 2015 and 2020, it becomes really, really important. And so that's really what we're looking at.

We all hoped for cellulosic. You know, everybody was disappointed that it hasn't come as fast. And hopefully it will in the future. But that has made it more challenging for all of us. There is certainly been some reductions in some of the ethanol, especially the mid-range ethanols. And certainly, we need to still look at the volumes of those ethanols and the relative volumes that we can get through alternatives like electric vehicles and other things that have to sync up if we're to make the transition work.

We need to be cautious about the credits. As you know, the reason we have excess credits is because we've been frozen at one percent. That is a significant element. We are concerned as we look forward that those credits get increasingly deficit as we go forward and the ramp-up occurs. So that -- again, that timing of how those all sync up becomes very, very important for us to sustain a program into the future. And that we want to make sure that the cost impact is associated with that.

So there is a lot more to talk about. Certainly appreciate again the continued dialogue. We want to share

with you the updates on the BCG analysis and look forward to working with not only your staff and stakeholders on new information. Because this is all about, as Chairman Nichols says, this is an informational hearing, not a regulatory development. But there is a lot of information to share. So we're anxious to continue that dialogue. It's been a good and healthy one.

The closer we get on assumptions, the better policy decision we'll be able to make.

CHAIRPERSON NICHOLS: This document that we're receiving today is dated May 28th, 2014, is that the most recent?

MS. REHEIS-BOYD: Chairman Nichols, we did submit some additional scenarios. In fact, your staff asked us to look at the Governor's goal of electric vehicles, some of the increased R&D. We've done that. We have a draft that we've just got internally. We'll be sharing that with your staff this week. We'll re-run the analysis using that data.

The dialogue in that exchange has been super helpful, because we're now at the point we're really looking at the data to drive the policy decisions. And we know that now because it's been four years. It's been really, really helpful. We're happy to share that. This is the recent one we submitted.

CHAIRPERSON NICHOLS: Appreciate that. I know as has been said before, there's many workshops and a lot of interactions. So thank you. To be continued.

Mr. Foster.

2.4

Mr. FOSTER: Good morning, Madam Chair and members of the Board.

Quentin Foster on behalf of the California

Electric Transportation Coalition. My comments in support of LCFS today will be relatively brief. CalETC, we are a nonprofit association with the Board of Directors that includes Los Angeles Department of Water and Power, PG&E, SMUD, San Diego Gas and Electric, and Southern California Edison.

We appreciate the opportunity to comment today on the staff recommendation to further strengthen the low carbon fuel standard, which we strongly support. First, we applaud Richard Corey and his staff for facilitating a robust stakeholder process with workshops focused on the purpose of enhancing the design and implementation of the LCFS policy.

The regulation is designed to set a standards for the regulated industry and allow the industry to best determine how to meet those standards.

To echo the staff presentation today, already as a result of this policy that is providing consumers with

more fuel and energy choices, we are witnessing increased innovation in both the fuels and the vehicle markets. In short, the policy is working.

Early implementation of the LCFS has demonstrated the effectiveness of the design in that the industry is over-complying and credits are being generated from sources not originally anticipated during the development of the LCFS policy. Staff has meticulously considered all aspects of the regulation and the recommendation that they are proposing today.

Specifically, we appreciate the addition of forklifts and fixed guide way systems being included in the recommended language. We have long advocated for this as the definition of transportation fuel in the LCFS includes non-road uses of transportation fuel.

We look forward to continuing to work with staff in 2015 and later years as this essential regulation is proposed for re-adoption to add other types of non-road electric transportation to the low carbon fuel standard.

Thank you for your consideration today.

CHAIRPERSON NICHOLS: Thank you.

Mr. O'Donnell.

MR. O'DONNELL: Good morning, Chair Nichols and members of the Board. Thank you for the opportunity to offer a couple of comments about the low carbon fuel

standard.

My name is John O'Donnell. I'm speaking on behalf of the Glass Point Solar. Glass Point is a California company. We manufacture solar stream generators for the oil and gas industry worldwide. We offer California operators low cost steam for production operations. Solar steam replaces fuel fired steam in expanding production and reducing emissions, both criteria pollutants and greenhouse gases. We've been operating the pilot project in California now for more than three years, much larger facilities in the middle east. And we're excited about the potential for full-scale deployment here in California.

Staff earlier this year estimated that solar energy facilities under the proposed innovative crude provisions could enable solar to deliver more than four million tons a year of emissions reductions into the system.

Glass Point appreciates the effort staff has been making to develop a regulation that will work well for all parties and enable investments in these kinds of facilities in California. These facilities will deliver California jobs, Central Valley air quality improvements, they're displacing combustion, especially in hot summer days in the Central Valley, and permanent reductions in

the carbon intensity of California transportation fuel.

I'd specifically like to thank staff for the efforts in simplifying and revising the innovative crude provisions.

Today's time line update that the regulation won't come to you for a vote in November or even this year creates potential timing for us and for the entire solar industry seeking to deliver credits under this program. The solar industry faces a fixed federal deadline at the end of 2016. The current investment tax credit expires. If your project is not online by the end of 2016, you experience an effective 20 percent price increase.

Our projects take not only 18 months from start to online, the window starts to close early next year. Staff's been aware of this timing concern. We understand the delay is not associated with this issue, the implications of a delay fall particularly heavily on any solar technology that -- and their customer.

So for some projects, the cost per ton and the viability of the project depends on this regulation. So delay is significant, especially if there is this possibility of a 20 percent price increase. We greatly appreciate the simplifications that have been made in the updated regulation including default scores for projects. We believe that these simplifications can reduce investor

uncertainty and shorten the time required and staff workload for processing and approval of the individual projects.

2.4

We respectfully request that you continue to direct attention into how we can shorten the time line so we can get some of the first of these projects online before the credits expire. Thank you very much.

CHAIRPERSON NICHOLS: Mr. White.

MR. WHITE: Thank you. Chuck White with Waste Management. I'm also representing the Bioenergy Association of California, of which Waste Management is a charter member.

Waste Management provides comprehensive environmental services throughout the US and California. And we're currently in the process of transitioning our entire 2,500 heavy-duty vehicle fleet in California to low carbon renewable natural gas, in large part due to the California LCFS.

We are further developing and operating projects to provide low carbon fuels in California. And we're working with the Oregon Department of Environmental quality to hopefully adopt a similar program in that state.

The Bioenergy Association of California promotes sustainable bioenergy and is focused on bioenergy

generation from a wide range of sustainable organic urban waste from agricultural and forest resources. According to ARB's own pathway, these are the feed stocks that produce the lowest carbon fuels they can help obligated parties meet the low carbon fuel standard.

BAC is working with U.C. Davis to estimate their biofuel potential of very low carbon fuels that can be produced from urban forests and ag waste in California. We think there is a potential about 2.1 billion gallons per year of waste derived fuels that could be produced, although it's going to be economics that will drive the development of these projects.

The LCFS is working as intended but needs to be strengthened. The alternative fuels market is growing but more low carbon fuel producers need to be encouraged to enter the market. Regulatory and market uncertainty is really critical to investment in low carbon fuels.

The BAC was extremely disappointed this year when we were unable to move AB 3290 out of the Assembly. That would have created a green credit reserve that would have entered into long-term contracts for the value of LCFS credits. And that's what we need is price certainty for the most value of the fuel and the credits in order to invest in the 20 or \$30 million projects.

In the written comments I submitted to you, I

give you an example of a challenge we're facing in biomethane, but I won't go into that in the interest of time.

2.4

Recent wild swings in LCFS prices due to LCFS legal and political challenges to the program have undercut investor confidence in the LCFS market as a dependable source of revenue to support investment.

In our view, however, there are a variety of things ARB can do. First, you should maintain a strong compliance curve through 2020 and beyond. Compliance curves will determine the scale of the market opportunity and therefore the level of private sector interest in expending the availability of low carbon fuels.

Second, any transparent and predictable market rules to ensure temporary challenges are avoided and credit clearance mechanism you're considering and a price floors we think on the order of about \$50 per metric ton of CO2 metric ton would be appropriate.

Third, the CARB should look at the values of credits are legitimate that have never been created but here historically valid. No useful credits be left on the table in ways when people submit new pathways to be able to go back in time to value those credits.

Finally, devote more resources to approving LCFS pathways.

In conclusion, the ARB must continue to strengthen of the LCFS to attract and expand a level of low carbon fuel development necessary to meet the low carbon fuel objectives. Thank you.

CHAIRPERSON NICHOLS: Thank you very much.

BOARD MEMBER SPERLING: Could I ask a question?

CHAIRPERSON NICHOLS: Yes, of course.

BOARD MEMBER SPERLING: You mention this idea of a price floor. It's kind of jarring to me just because we just heard from WSPA that said it's impossible to meet the ten percent requirement by 2020, which implies the credit prices would go up, not go down. So why do you think there is a need for a price floor?

MR. WHITE: It's just if we knew there was a certain guaranteed value we could get for the credits that would provide certainty on the revenue stream necessary to support the 20 to \$30 million investment to build these plants. I have to admit Waste Management is a conservative investor and the uncertainty of future values of credits is what's really given us pause in investing much more than we're doing now in the production of low carbon renewable fuels.

Unlike power purchase agreements where you can enter into a 30-year or 20-year contract with the public utility to produce renewable electricity, you're given --

and those contracts, you're given the price up front. You know exactly what your revenue stream is going to be for 20 years. Under the low carbon fuel standard, the price value of fuel, say natural gas value, is like \$4.50 per MMBTU. We need about a 10 to \$15 revenue stream that includes the base price of the fuel, includes the RFS 2 credits and includes low carbon fuel standard credits in a predictable fashion for sufficient time to get the capital pay back.

And we need to have a price floor or at least certainty that there is not going to be these wild fluctuations in price in the future when we depend on this revenue stream to defray the debt that we occurred in developing these projects.

BOARD MEMBER SPERLING: Do you have any evidence that the banks will not --

MR. WHITE: We have not found anybody that will enter into a long-term contract for the value of the LCFS credits for five to ten years necessary to pay that.

We're willing to take a haircut on the value of the credits. But we need to have a certainty in that revenue stream in order to make the investments necessary.

BOARD MEMBER SPERLING: This is even from these oil companies that are saying that it's -- the price is going to go way up because it's so difficult to meet it?

They're not willing to buy --

2.4

MR. WHITE: I can't mention any names because we entered into non-disclosure agreements with people we've had the discussions with. I can assure you we haven't found anybody that's willing to enter into five or ten year contracts for LCFS credits going forward.

BOARD MEMBER SPERLING: Thank you.

CHAIRPERSON NICHOLS: Okay. Ms. Mendoza.

MS. LOPEZ-MENDOZA: Good morning, Board members and staff. Happy Friday.

I'm from the Southern California Gas Company. My name is Jerilyn Lopez-Mendoza. I just wanted to tell you we are very much in support of the LCFS. Southern California Gas has opted into the program, and we are active participants in the stakeholder process this staff has been engaging in. We actually want to say we appreciate the hard work of staff and really appreciated particularly their moderation skills during our last technical advisory group meeting, as they were very much engaged in that regard.

We believe this policy helps our meet our greenhouse gas reduction goals and objectives and we just want to simply put on the record that we support moving forward and look forward to participating in the re-adoption process.

Thank you very much. And I dearly hope there are no questions.

CHAIRPERSON NICHOLS: Good.

MS. O'BRIEN: Yes. Good morning, Madam Chairman, Board members, as well as staff.

Rachael O'Brien on behalf of the Union of Concerned Scientists as well as Consumers Union, which is the policy and action division of Consumer Reports.

Thank you for the opportunity to comment on California's low carbon fuel standard regulation, which we believe is vital and transformative -- is a vital and transformative role for the future of clean transportation and fuel in California and beyond.

The state's LCFS is an important tool to help cut carbon emissions. And reducing petroleum use will not only reduce carbon pollution and other health-threatening pollutants associated with the manufacture and use of petroleum products, but research indicates this policy can lead to more money in consumers' pockets, good jobs, and a more secure energy supply, and will secure California's role as a leader in innovative transportation technology.

Because the LCFS uses a technology neutral performance-based approach, fuel producers can comply in many ways. One option is to either sell greater amounts of cleaner fuels or buy credits for others who do.

Another option is the use innovative methods in the production process for existing fuels, for example, replacing natural gas with solar heat and the production of oil. The LCFS also supports cleaner fuels that minimize competition with food and forests.

The gas at our local stations already contains ten percent of corn ethanol on average, but we believe corn ethanol is not the fuel of the future. Cellulosic biofuels made from agricultural waste, for example, allows us to fuel up without putting added pressure on our food, water, and climate.

The LCFS accounts for emissions from land use, steering the market towards biofuels that minimize deforestation, and use land efficiently or do not use land at all, like fuel made from agricultural waste.

On the UCS side, they released a report showing California is one of the top ten states in terms of potential ag residues to make into fuel. A link to this report was submitted in our written comments.

And to date, USC is hosting a cellulosic summit that is bringing clean fuel exports from California, around the country, out to visit one of the first commercial-scale cellulosic biofuel facilities in Iowa. With policies like this, the LCFS future facilities can produce cleaner fuels from California's abundant

agricultural residues.

2.4

Of course, policy stability is needed to give investors the confidence to make big bets on clean fuels. By re-adopting the LCFS, adding sensible refinements like a cost containment mechanism and initiating work on post-2020 targets, the Board will support the investments required to make LCFS and broader suite of climate policies work as intended.

In closing, we just want to thank the CARB staff for working diligently with the stakeholders to ensure that any amendments to the rule are informed by the best scientific and technical information.

We look forward to supporting the plan. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Our speakers are getting much better at learning how to not take a breath when the buzzer goes off, which it makes it very difficult to stop you. But I would really appreciate if people would try to stop when the buzzer goes off. Thank you.

MR. HALL I will do my best.

Good morning, Madam Chair and members of the Board.

My name is Jaime Hall. I'm Policy Director for CALSTART, a nonprofit organization with about 150 member

companies across the clean transportation space.

We're here today in support of the LCFS. We want to thank the Board and staff for the work on this program. We believe it's working as intended, but I don't expect you to just to take my word for it. It's based on what I'm hearing from industry.

We held our second annual clean low carbon fuel summit here in Sacramento back in April. There were more than 120 people taking part, industry leaders and stakeholders representing a wide array of fuels from biofuels to natural gas, electricity, hydrogen, and DME.

The goal is discuss what's working nd what's not in fuels policy in California. There was some discussion about the issues Chuck White raised around capital financing, certainty, potential enhancements, or complimentary policies needed to keep us moving forward faster.

But the tone was overwhelmingly positive overall. There was strong support for the LCFS and all of our fuels policies under AB 32 as critical market drivers. It was really remarkable to see this very diverse group of stakeholders representing all these different fuels standing up and saying the same thing. They were all saying we have to stay the course on these policies. They were all agreeing we needed a diverse portfolio of fuels.

No one thought their solution was the silver bullet. And they all gave us concrete examples of the tremendous progress we're making in all these fuels.

There's growing volumes of clean fuels entering the market. The fuel mix is not what we all expected I think at the outset. But that's the beauty of the market based system. There are a lot of different pathways to the future, all of which are better than status quo. So thanks again for all your work. And please continue to move forward and stay the course on this policy.

CHAIRPERSON NICHOLS: Thank you.

Bill.

MR. MAGAVERN: Bill Magavern with the Coalition for Clean Air also urging you to stay the course on the low carbon fuel standard.

This policy was created I believe out of a recognition that we need to wean ourselves off of our addiction to oil when it comes to transportation fuels, that fuel efficiency is absolutely essential. We're doing a good job there. As we discussed earlier this morning, changes to land use are essential and we're starting to make some progress there. A lot more needs to be done.

And thirdly, it is vital that we change our transportation fuel mix. And the low carbon fuel standard is starting to do that. It is in the early stages

working. I agree with Jamie Hall, the fuel mix is not exactly what was anticipated several years ago. But that's okay because the LCFS takes a portfolio approach. There are a diverse variety of fuels that can help to meet the standard. So far that's happening.

We always want to make sure that in alternative fuels we're not doing any backsliding on air quality. And the issue of NOx emissions from biodiesel has been a sticky one. For a while, it seems like we still don't have the answers. And so I think you're taking the right approach by continuing to study it.

I also think one of the great contributions that this Board has made to the question of global life cycle greenhouse gas emissions from fuels is the indirect land use conversion factor. I know you're continuing to hone that. It's important that we get that right. So I support the continued study there.

So it is working. Some challenges remain. But again, we urge you to stay the course.

CHAIRPERSON NICHOLS: Thank you.

Dina.

MS. BISCOTTI: My name is Dina Biscotti. I'm here on behalf of the BlueGreen Alliance a national coalition of labor and environmental organizations. We believe it's possible to meet today's environmental

challenges in ways that create and maintain quality jobs and a stronger more socially just economy.

2.4

We remain strong supporters of AB 32 and the low carbon fuel standard. We are grateful to the Board and to CARB staff for your ongoing work to improve the LCFS. We are engaging with staff who have been responsive to our input. And we are pleased with the robust re-adoption process that is underway.

Earlier this month, the United Steel Workers, the Natural Resource Defense Council and the BlueGreen Alliance sent a joint letter to Mr. Waugh expressing our support for CARB's efforts to establish a cost containment mechanism and LCFS pathway for refinery improvements.

A well-designed cost containment mechanism can make the LCFS program more resilient. It can create greater cost certainty, while preserving the vital signal to invest in emissions reductions. CARB may wish to consider whether refineries should provide CARB with investment plans that show how they will make up for any deficits accrued. Credits for refinery improvements can spur additional investments in our refineries and create jobs, while reducing the carbon intensity of our transportation fuels.

We also support credits for investments in innovative greenhouse gas reducing technology, such as

solar thermal, as was previously mentioned at refineries.

Thank you again for all your work. And we look forward to the continued smooth implementation of a low carbon fuel standard.

CHAIRPERSON NICHOLS: Thank you.

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

I'm Simon Mui with the Natural Resources Defense Council directing our clean fuels and vehicles work.

First, thank you to staff and management for their exquisite hard work, six years over development of this program. And we're starting to see it take flight.

Our organization has been very supportive of the LCFS as a critical piece of California's toolkit around AB 32. We know it's working. With just three years of implementation under the belt, the program has resulted in nearly eight million metric tons of reduction. We're seeing record volumes of alternative fuels come into the market now, and we're also seeing nearly every fuel provide are we talked to talk about ways they are reducing carbon emissions. And that is the name of the game.

We're also seeing that California's leadership does, indeed, matter. We heard about the Pacific coast climate action plan earlier. The Governor is moving forward now across the region with clean fuel standards in

their own states.

Now, this January, the Board is scheduled to look at the LCFS to address some of the procedural errors found in the state lawsuit. We think it's smart for the Board and the management and staff to take this opportunity to both enhance and strengthen the LCFS going forward.

And there is three ways we are focusing on to do that. One is to maintain the ARB's 2020 targets and establish stronger targets beyond 2020. Doing so will provide longer-term market certainty as well as reflecting the environmental necessity to continue progress.

You heard a little bit from BlueGreen Alliance about the opportunities to reduce emissions even under the petroleum supply chain. And we support technologies that can do that. We heard from Glass Point as well identifying it. Our analysis last year showed that just five innovative technologies could contribute over a third of the reductions from the program.

Finally, establishing clear market rules. A smart structural improvements likes the cost containment mechanism. Specifically, the credit clearance mechanism can help address some of the uncertainty you heard being discussed both in terms of the supply, as well as credit prices.

So again, I'd like to thank you for your

testimony work here going forward. We're seeing California's leadership make real progress. Let's work to improve the program going forward starting in January. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Carmichael.

MR. CARMICHAEL: Good morning, Chairman Nichols, members of the Board. Good to see you all.

Tim Carmichael with the California Natural Gas
Vehicle Coalition. Our industry strongly supports this
program. As the staff's pie chart shows, we're actively
participating in it and contributing credits. We expect
that contribution to grow over time, especially with the
growth of the renewal natural gas in the marketplace. We
appreciate being part of the discussions with the staff on
how we might make this program stronger and more
sustainable beyond 2020. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Will Barrett.

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

I want to first all of thank staff for the thorough update this morning and the opportunity to continue to work with you on the LCFS Program Review Advisory Panel.

We appreciate the work that's been going on on the revisions to the program, and especially in the thorough discussion of the NOx questions around biodiesel and think that's really important thing to continue to hammer out.

The American Lung Association and hundreds of our health partners for clean air strongly support the efforts to implement and re-adopt the LCFS, which we believe is now working to basically offer cleaner fuel choices to California to clean up our air.

As part of the broader AB 32 package, the LCFS sends the signal the transition is underway from healthy fuels to cleaner options, like electricity, advanced biofuels, and hydrogen.

Just this week, the Energy Commission approved grants to roll out a growing hydrogen fueling infrastructure, a good portion of which will be renewable hydrogen. These ultra low carbon fuels are the outcome of well-resigned California programs across the board that are responding to the public's desire for a sustainable cleaner future.

Health groups support the LCFS because the health impacts of dirty air are costing us billions of dollars each year in heart attacks, asthma attacks, and premature deaths. These health impact disproportionately fall on

our children, seniors, those with chronic illnesses, low-income communities, and communities of color.

In May, the Lung Association -- we partner with Environmental Defense Fund to produce the Driving California Forward report on the health climate and other societal benefits to fully implementing the LCFS and fuels in the cap.

We found that Californians could avoid over \$10 billion dollars in health and other damages by 2020 and 23 billion in damages by 2025 as these programs spur healthier fuels going forward. The findings include significant health benefits to Californians, including 900 avoided deaths and 38,000 avoided asthma attacks, and 75,000 days of work lost, avoided due to respiratory impacts.

As the re-adoption moves forward, we urge the Board to fully evaluate these types of health benefits in both the environmental and economic analysis that's going on. Further, we believe that updating the guidance for the air quality guidance for citing new biorefineries will add to the health protective nature of the low carbon fuel standard.

In closing, the LCFS is a critical tool to protect Californians from unhealthy fuels. The program is working to deliver clean fuels. And maintaining momentum

and a strong signal will save more lives and more money. We look forward to working with you as the LCFS is re-adopted in January and to really develop the stronger signal for post-2020 target as laid out in the Scoping Plan earlier this year.

Thank you very much and have a great day. CHAIRPERSON NICHOLS: Thank you.

Timothy O'Connor and then Todd Campbell is our last witness.

MR. O'CONNOR: Good morning, Chair Nichols, members of the Board.

My name is Tim O'Connor. I work for Environmental Defense Fund. You're being handed -- Will Barrett from the American Lung Association just referenced in that report we model what the vehicle mix in California will be because of policies like the low carbon fuel standard and including transportation fuels in the cap and trade program.

By comparing what the fleet mix would be without these programs to what it is with these programs, as Will mentioned, we modeled the benefits of these policies to be over \$23 billion between now and 2025.

When you look at what that means not just from an economic savings but really from a health savings, we're talking about significant opportunities to clean up the

air and help communities across California become healthier and avoid lost work days from having to stay home because kids are in the hospital or in their bedrooms with asthma attacks as opposed to on the playgrounds where they should be.

In addition though to these public health and economic benefits, Environmental Defense Fund has been looking at the business communities in California that's been growing because of these policies. While we're fortunate today to hear from businesses like Green Energy and Waste Management and Glass Point that are delivering solutions that capitalize on California's clean transportation policies, there is hundreds and hundreds more that can't make the trip up here to talk about them. The companies like BYD American and Green Automotive and Motive Power Systems are delivering advancements in zero emission electric buses where you have kids that are being dropped off at school in a device that doesn't pollute them and cause them to get sick as they're running out the door to go to their classrooms.

Similarly, companies like Community Fuels and New Leaf Fuels are delivering biodiesel throughout California in ports of Stockton and down in San Diego where we need more economic development and more jobs.

And another company named Edinique is a company

that we're recently been profiling in our California
Innovator series, which is delivering actual advancements
in ethanol facilities to improve the efficiency of
producing biofuels. These are companies that wouldn't
exist accept for California's clean transportation
policies. There are over 300 of them in California. I'm
sure each of them wish they could come here to the state
and talk about the benefits of these policies. But
they're busy growing their businesses and capitalizing the
opportunities that you and the staff have here have been
able to create.

Finally, there was a letter that was sent to Chair Nichols back earlier this month from 74 economic and energy experts talking about the benefits of these policies. And when we look at the fuel diversification that was mentioned in the staff presentation today, not only, of course, does it improve the environment of California, but it improves the economy of California as we reduce fuel price strikes and reduce volatility and reduce prices overall. Be happy to submit that to the Board for consideration today. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

MR. CAMPBELL: Good morning. Todd Campbell,
Clean Energy. Clean Energy is a natural gas and renewable
natural fuel provider both for natural over 550 locations

across the nation. And a lot of our success in California is largely due to the policies that this very agency has promoted to clean the air and lower carbon. And we thank you for that.

Clean Energy, as you know, also has served on all the advisory committees and participated workshops since the rule's inception. Clean Energy remains confident the staff continues to take the necessary steps and precautions to ensure the program is successful. Clean Energy supports the Board's re-adoption of the low carbon fuel standard. And we see it as an opportunity to improve upon a program that is already delivering low carbon fuels to market above staff's expectations.

Not only is the standard working, low carbon fuels in the transportation space provide significant savings. For example, natural gas from renewable natural gas are delivering about a dollar to \$1.50 in cost savings per gallon of fuel compared to diesel and gasoline.

But to ensure that California continues to meet its 2020 goal of ten percent less carbon and transportation fuels, it will be critical for the Board and staff to enhance market certainty to ensure that we have the investor confidence to expand low and ultra low carbon fuel production for generations to come. We want to do more than ten million gallons last year. We want to

get to 150 million gallons the next five years.

So, therefore, we recommend that the Board and staff consider the following recommendations:

One, maintain a strong compliance curve through 2020 and establish stronger compliance curves to continue progress beyond 2020. In fact, investors want to know how serious California is about low carbon fuels. Sketching out the Board's and staff's intent to 2030 would be helpful for low carbon fuel producers in attracting necessary capital required to meet California's future goals.

Two, adopt transparent and predictable market rules to ensure the temporary challenges in supply of low carbon fuels or credits will not disrupt the market. Much like Waste Management and the Biofuels Association of California, we too support the price floor to help in the financing of low carbon fuel production moving forward.

Three, allow producers that file new pathway applications to generate new credits for field delivered for two calendar quarters prior to the quarter in which the staff provides written confirmation that the pathway has been deemed complete.

Such an action will ensure the low carbon fuel producers will have greater confidence when they invest to provide low carbon fuels to the California market. This

action will maximize credit generations for these fuels that are approved by ARB. The loss of economic value of credits that can be generated on fuel deliveries made during pathway application review processes is a very real concern to producers, and we acknowledge how staff is working through the applications given the resources. This compromise would really ease the tension and strain felt by all involved.

I just would conclude Clean Energy is very committed to the low carbon fuel standard. We're committed to working with you. We think it's working. Please keep it up. We want to thank Richard Corey and the staff's good work in moving us forward.

CHAIRPERSON NICHOLS: You get extra time when you say nice things about staff. Thank you very much.

That concludes the list of people that signed up to testify on this item. As we said at the outset, this is a work in progress. We're getting ready to launch a formal consideration of changes to the rule as part of the process of re-adoption of the rule. I don't think there is any question that the staff is going to be proposing re-adoption of the low carbon fuel standard.

So the only question is what kinds of improvements we might want to make. And obviously, we heard some suggestions designed to strengthen the market

for lower carbon fuels and to make the process of credit trading easier, more transparent, et cetera.

Other concerns have been raised. Certainly, also we know WSPA has concerns about compliance, both in terms of timing and of cost. And we will have to take all those things into account as we move forward. But generally speaking, the report is positive one. And appreciate very much the good work that went into it.

So I think that will conclude this item, unless anyone feels a necessity to give further comment or direction on it. If you do, we have a few minutes. We do have two people who signed up to speak in the public comment period. Yes.

BOARD MEMBER MITCHELL: Madam Chair, if I might make one comment on the low carbon fuel standard. I want to thank staff for all the work on this. Richard Corey and all of you have really been very, very accommodating and very productive in this regard.

One of the concerns, of course, as we know is the impacts that we might experience from increases in NOx.

And just want to encourage staff to consider a technology assessment with regard to those adverse NOx impacts. I think that will be needed as we move forward into regulation. Thank you.

CHAIRPERSON NICHOLS: I think that's part of the

work they're planning to do.

Yes, Dr. Sperling. The Godfather of low carbon fuel standard. You don't like that introduction?

BOARD MEMBER SPERLING: I like it. I'll go with that.

CHAIRPERSON NICHOLS: It was a complement.

BOARD MEMBER SPERLING: Thank you.

Just one little thought is, you know, when we started this whole process with the low carbon fuel standard, it was really premised on the idea of innovation. We had -- we really didn't have a very good idea exactly how it was going to play out. I think we still really don't have a really good precise idea of how the goals and targets are going to be met.

But we're seeing now more and more companies coming forward very publicly now saying how important the LCFS is in terms of simulating them to invest, to innovate. And that's what we wanted to achieve. So I mean, it's starting to look like a real success story. And the BCG study that WSPA gave said they forecast five percent reduction is possible, likely. I'm not sure exactly what the word would be for 2020. And you know, that's kind of interesting because it doesn't include all the innovative things that we aren't anticipating, like gas, the solar thing for refineries. Waste Management

making a major investment in biogas for vehicles. So there's a lot of interesting innovative things that are happening. And that's what this really is all about. So I just kind of wanted to recognize what we heard today.

CHAIRPERSON NICHOLS: Thank you.

Yeah, I think it's actually kind of a good opportunity to have this moment to reflect what we have accomplished already and in spite of litigation consternation, et cetera, there is a lot that has been accomplished. Okay. Great.

We do have public comment period at the end of each meeting. Two people have signed up. They both want to talk to us about the same topic, corporate disclosure under the cap and trade regulation. I received some mail on this, and I suspect other Board members may have as well. So Ms. Rothrock.

MS. ROTHROCK: Thank you, Mr. Chair and members.

I'd like to bring to your attention an urgent matter. As Chairman Nichols mentioned, you may have received letters in the last few days on this topic. This regards the requirement in the cap and trade program for the disclosure of corporate affiliations for those that are participating in the market.

The recent cap and trade regulation greatly expanded this disclosure requirement to include worldwide

affiliations without regard to whether these affiliates have any connection with the California market. Some global companies have more than a thousand such entities, and the volume of information required on each and the frequency that the information needs to be updated to reflect any changes or additions is extremely burdensome and likely impossible to accurately comply with.

Another requirement to disclose law firms providing legal advise we believe runs afoul of basic rights to seek legal advice on a confidential basis.

The rule now in effect and the first reports are due July 31st. That's just around the corner next week. This may interfere actually with market operations if companies can't comply with this regulation and therefore chose not to participate in future auctions. They take the responsibilities to be in full compliance with the law very seriously, and company officers will be very reluctant to put their names on documents that do not meet your regulatory requirements.

We very much appreciate the staff has been working on guidance to clarify the requirements and provide some flexibility. But we can't rely on that guidance process if it conflicts with the clear meaning of the regulation. And so therefore, we've sent you the letter signed by many companies and trade associations

asking for the Board or the staff to issue a regulatory advisory to suspend the regulation long enough to fix the rule.

The regulatory advisory is a process that you've used during the low carbon fuel standard implementation to provide the flexibility you need to get that regulation properly implemented.

During the suspension, the pre-existing rule would be in effect, which does require disclosures that at least until the recent amendments seemed satisfactory for the operation of the program.

This is very urgent. The implementation requires us to comply next week. We have experts that are willing to show up as early as Monday to discuss this further.

Urge your attention to this matter. Thank you very much.

CHAIRPERSON NICHOLS: Thank you, Ms. Rothrock. We might as well listen to Ms. Blixt first and then we'll give staff an opportunity to comment.

MS. BLIXT: Hi. Amber Blitz for the Independent Energy Producers Association representing over 26,000 megawatts of independently-owned generation in California here.

Like my colleague Ms. Rothrock, I'd like to bring your attention to the issue related to the most recent round of cap and trade regulations regarding disclosure of

corporate associations. These regulations became effective July 1st, as the representative from CMTA said, required registered entities in the cap and trade program to disclose corporate association, even with corporate associations with entities that are not registered in the cap and trade program.

Many of the companies that I represent and just all of the companies that are effected by this have large and/or complex ownership structures spanning across multiple continents which makes tracking and reporting and updating any changes in ownership structure difficult, to say the least.

IP was part of larger coalition that submitted a letter regarding this issue on June 17th asking for additional guidance. This week on Monday, July 24th, we requested CARB to suspend application and enforcement of these new requirements through a regulatory advisory, which would give industry more time to comply and work with staff on amendments that would get the CARB information that we really think they're after. And then this would -- without having to disclose their corporate associations consistent with the existing regs.

So we believe that as currently crafted, the regulation creates an unnecessary administrative burden to these large and/or complex organizations. And it's not

really clear to us what the added value is to the CARB in collecting this information on non-regulated extraneous entities, nor is it clear how this information will be used on a going-forward basis.

So like Ms. Rothrock mentioned, with the July 31st deadline looming next week, we just wanted to bring this to the Board's attention on the issue of the need for a regulatory advisory that would help the industry and CARB have more time to work through these issues. So thank you very much for your attention.

CHAIRPERSON NICHOLS: Thank you. As you know, since this isn't a scheduled agenda item, we can't take action as a Board on this. But we can certainly express interest and ask the staff to comment on what's going on. This issue has come up a couple of times in the past, and I recall that staff had a pretty firm view that the information that was being requested was needed for oversight and enforcement purposes as far as the market is concerned. But we continue to hear obviously loud protests, and it appears as though we're cruising towards some sort of a deadline that now may cause problems.

So Ms. Chang, can you give us an update on what you're thinking?

DEPUTY EXECUTIVE OFFICER CHANG: So first I want to clarify. The regulatory amendments that took effect on

July 1st of this year actually relaxed the reporting requirements for corporate associations. The requirements to report corporate associations that are not directly involved in the California market have been in place for years, and entities that are participating in our auctions are required to provide us that information and they're required to update that information before they participate in auctions. So if there's changes between auctions, so we've been working with entities on that.

And so folks that are participating have been participating in auctions are probably largely in compliance with the regulation. They would need to provide us any updates they have from the last time that they reported. We are willing to take updates from any forum that they provide corporate association information to publicly traded companies provided to the SEC. Some companies provide it to the PUC. And we've had companies provide us that information in those formats.

I do want the mention that there are multi-national corporations that have complied with the regulation and already submitted their information.

I would also mention that we understand that the corporate structures can be very complicated, and we have staff that have been working individually with companies and more than happy and willing to work with companies.

We don't think a regulatory advisory is necessary at this time.

2.4

I was actually going to mention we have staff in the room now who have been personally involved in interpreting this and working with companies. If there are folks here who are interested in talking with them, they are available.

I also want to mention because this gets brought up a lot why are we asking for all this information and are we actually using it. There is concern about not just the folks that are participating within our carbon market, but the types of fraud that we've seen in recent years has really involved manipulating another market in order to have a benefit in a different market.

So we've seen that where you may be manipulating a commodities market in order to gain an advantage in a derivatives market. So the information that's being provided is being provided to our market monitor. The market monitor is using the information for corporate affiliates that are involved in related markets. So energy markets, electricity markets, other sorts of environmental commodities markets. They have algorithms they use to track what's happening in those markets.

The types of fraud that we're concerned about are things that are happening over long periods of time, so we

do need to see trends. Because I know there has been a discussion about if you see a big blip, maybe you can just ask for it later. These are really -- and analyses that we're doing over periods. So I do want to assure folks that the information isn't just being provided into a black hole, but we are actually using this information.

CHAIRPERSON NICHOLS: Well, that is good to know in a time when everybody is sensitive about just collecting excess information.

I think on this one, we've been trying to make this program as streamlined as possible. So it would seem counter-intuitive to be collecting data that is not actually needed. But if there is a way to make the collection process easier, in terms of the amount of reporting or the frequency of reporting and so forth, that could be something to think about.

DEPUTY EXECUTIVE OFFICER CHANG: That's actually a good reminder to me. We are going to be proposing amendments to the cap and trade regulation again because it was so much fun that would come to the Board in September. And one of the things that we're planning to propose in that round of amendments is that for your corporate affiliates that are not directly involved in the California market, the reporting would move to annually instead of quarterly.

CHAIRPERSON NICHOLS: Okay. That would certainly be helpful. Okay. If there are no further comments, questions from the Board, then I think we have completed our agenda, and I will accept a motion to adjourn. BOARD MEMBER EISENHUT: So moved. CHAIRPERSON NICHOLS: Seconded. All in favor? (Unanimous vote) CHAIRPERSON NICHOLS: We're adjourned. (Whereupon the Air Resources Board recessed at 11:31 a.m.)

CERTIFICATE OF REPORTER

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

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 7th day of August, 2014.

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