JOINT MEETING

STATE OF CALIFORNIA

CALIFORNIA AIR RESOURCES BOARD

AND

CALIFORNIA TRANSPORTATION COMMISSION

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TUESDAY, APRIL 9, 2019 1:04 P.M.

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

### APPEARANCES

### CARB BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. John Eisenhut

Ms. Judy Mitchell

Mrs. Barbara Riordan

Dr. Alex Sherriffs

Professor Dan Sperling

Ms. Diane Takvorian

### CTC COMMISSIONERS:

Ms. Fran Inman, Chair

Mr. Paul Van Konynenburg, Vice Chair

Mr. Bob Alvarado

Ms. Yvonne Burke

Ms. Lucy Dunn

Mr. Carl Guardino

Ms. Christine Kehoe

## CARB STAFF:

Mr. Richard Corey, Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Mr. Steve Cliff, Deputy Executive Officer

### APPEARANCES CONTINUED

### CARB STAFF:

- Mr. Kurt Karperos, Deputy Executive Officer
- Ms. Ellen Peter, Chief Counsel
- Ms. Veronica Eady, Assistant Executive Officer

### CTC STAFF:

- Ms. Susan Bransen, Executive Director
- Mr. Mitch Weiss, Chief Deputy Director
- Mr. Garth Hopkins, Deputy Director
- Mrs. Laura Pennebaker, Associate Deputy Director
- Mrs. Teresa Favila, Associate Deputy Director
- Mrs. Laurie Waters, Associate Deputy Director
- Mrs. Dawn Cheser, Associate Deputy Director
- Mr. Matthew Yosgott, Associate Deputy Director
- Mrs. Christine Gordon, Assistant Deputy Director
- Ms. Amy Macpherson, Public Information Officer
- Mr. Doug Remedios, Associate Governmental Program Analyst

### SPECIAL GUESTS:

- Mr. Chris Ganson, State of California, Office of Planning and Research
- Ms. Kate Gordon, State of California, Director, Office of Planning and Research
- Ms. Tilly Chang, San Francisco County Transportation Authority

### APPEARANCES CONTINUED

### SPECIAL GUESTS:

- Mr. Laura Podolsky, University of California, Institute of Transportation Studies
- Mr. Alvaro Sanchez, Greenlining Institute
- Ms. Dara Wheeler, Caltrans

### ALSO PRESENT:

- Dr. Alberto Ayala, Sacramento Metropolitan Air Quality Management District
- Mr. Rob Ball, Kern Council of Governments
- Mr. Bill Boyce, Sacramento Municipal Utility District
- Ms. Kristine Cai, Fresno Council of Governments
- Mr. Andrew Chesley, San Joaquin Council of Governments
- Mr. James Corless, Sacramento Area Council of Governments
- Ms. Rosa De León Park, Stanislaus Council of Governments
- Mr. Chris Flores, Sacramento Regional Transit
- Ms. Kevin Hamilton, Central California Asthma Collaborative
- Ms. Kim Kawada, San Diego Association of Governments
- Mr. Bill Magavern, Coalition for Clean Air
- Ms. Sunne McPeak, California Emerging Technology Fund
- Ms. Nancy Pfeffer, Gateway Cities Council of Governments
- Mr. Dylon Stone, Madera County Transportation Commission
- Ms. Tanisha Taylor, California Association of Councils of Government
- Ms. Ella Wise, Climate Plan

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# PROCEEDINGS

ARB CHAIR NICHOLS: If I could get people to take their seats. I see most of you are already. But the time has come. The acoustics in this room are amazing.

(Laughter.)

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ARB CHAIR NICHOLS: Wow.

It's been suggested that I open with a song, but I've decided not to do that today.

(Laughter.)

ARB CHAIR NICHOLS: Good afternoon, everybody, and welcome to the third joint meeting of the California Air Resources Board and California Transportation Commission. For those of you who have not been with us before, my Co-Chair of this joint body Fran Inman and I have taken turns chairing these meetings. So since she got to Chair the last one in Los Angeles, I get to be the Chair of this one. But we will also look forward to hearing from her and to having a very strong discussion later on in this meeting with all of the Commissioners who are here today.

The topic for today's meeting is innovative mobility. And I'm looking forward very much to hearing from our speakers on this topic, as well as to the discussion with our fellow Board members and Commissioners. It's growing to be important for us, all

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of us, to identify opportunities where our respective
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    agencies can incentivize innovative mobility to improve
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    the overall transportation system. That is a mission for
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    all of us.
             I'd like to begin the meeting, as we normally do
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    at CARB, by asking everybody to rise and face the flag,
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    which is over there, and we'll say the Pledge of
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   Allegiance.
             (Thereupon the Pledge of Allegiance was
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             recited in unison.)
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             ARB CHAIR NICHOLS: Okay. We'll begin the roll
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   call, starting first with the CARB Board members, and then
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    turn it over to the Chair of the California Transportation
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    Commission. So would the clerk please call the roll for
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   ARB, wherever you are?
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             ARB BOARD CLERK DAVIS: Dr. Balmes
             BOARD MEMBER BALMES: Here.
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             ARB BOARD CLERK DAVIS: Mr. De La Torre?
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BOARD MEMBER EISENHUT: Here.

Mr. Eisenhut?

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ARB BOARD CLERK DAVIS: Senator Florez?

Assembly Member Garcia?

Ms. Mitchell?

ARB BOARD MEMBER MITCHELL: Here.

ARB BOARD CLERK DAVIS: Senator Monning?

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Mrs. Riordan?
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             ARB BOARD MEMBER RIORDAN: Here.
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             ARB BOARD CLERK DAVIS: Supervisor Serna?
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             Dr. Sherriffs?
             ARB BOARD MEMBER SHERRIFFS: Here.
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             ARB BOARD CLERK DAVIS: Professor Sperling?
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             ARB BOARD MEMBER SPERLING:
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                                         Here.
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             ARB BOARD CLERK DAVIS: Ms. Takvorian?
             ARB BOARD MEMBER TAKVORIAN:
                                          Here.
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             ARB BOARD CLERK DAVIS: Vice Chair Berg?
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             ARB VICE CHAIR BERG: Here.
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             ARB BOARD CLERK DAVIS: Chair Nichols?
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             ARB CHAIR NICHOLS: Here.
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             ARB BOARD CLERK DAVIS: Madam Chair, we have a
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    quorum.
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             ARB CHAIR NICHOLS: Thank you.
             And now Chair Inman, would you like to call the
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   roll for your organization?
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             CTC CHAIR INMAN: Okay. I'm going to quickly
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    delegate. Doug, will you please call the roll?
             CTC CLERK REMEDIOS: Yes, Madam Chair.
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             Mr. Alvarado?
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             CTC COMMISSIONER ALVARADO: Yes.
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             CTC CLERK REMEDIOS: Commissioner Burke?
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             CTC. COMMISSIONER BURKE: Here
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CTC CLERK REMEDIOS: Commissioner Dunn?
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             CTC COMMISSIONER DUNN:
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                                     Here.
             CTC CLERK REMEDIOS: Commissioner Ghielmetti?
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             Commissioner Guardino?
             CTC COMMISSIONER GUARDINO: Present.
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             CTC CLERK REMEDIOS: Commissioner Kehoe?
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             Commissioner Tavaglione?
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             Commissioner Van Konynenburg?
             CTC VICE CHAIR VAN KONYNENBURG:
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             CTC CLERK REMEDIOS: Chair Inman?
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             CTC CHAIR INMAN: Here.
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             CTC CLERK REMEDIOS: Madam Chair, we have a
12
    quorum.
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             ARB CHAIR NICHOLS:
                                 Okay. If I may then, I'd
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    like to start with just a few announcements before we
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   begin. First of all, for safety reasons, I'd like to ask
    everybody to note the emergency exit at the rear of the
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    room through the lobby. So if you're sitting towards the
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    front of the room, you can exit out the doors behind me
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    and through the patio gate. In the event of a fire alarm,
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I also want to urge anyone who thinks they might want to testify to fill out a request-to-speak card, which is available either outside the meeting room or from the

we're required to evacuate this room immediately and to

assemble outside, until we get the all-clear signal.

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clerk of the Board, and to do it as soon as possible, because we're going to have to allocate the time according to the numbers of people that we have.

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Usually, at the Air Resources Board, we impose a 3-minute time limit on just regular public comment. And we ask people to summarize their -- any written remarks that they have and then to submit their written testimony. For today, it's going to be a matter of the amount of time that we have available to hear from members of the public and still have the presentations and the discussion among the two Boards that we need to have. So we've allocated about an hour for the public.

And depending on how many of you there are, we'll divide up the time accordingly. I'll talk about that more when we get to that point, but I did want to just make sure that people understand that it's really important that we hear from you as soon as possible, if you are planning to speak. And we want to hear from you. It's just that we have to -- we have to be careful about using our time efficiently.

So, first of all, I want to give a very brief update on the talks that are going on between the Air Resources Board and our federal government partners regarding the fuel economy standards and the greenhouse gas emission standards. I'm sure many of you have been

following this in the press.

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But we have been making news lately, not in our -- not necessarily because we wanted to. But we were in a situation where when the Trump administration announced that they had broken off talks with California over vehicle fuel efficiency standards, we had to start preparing for what might come next. Frankly, the administration in Washington is insisting on proposing and carrying out a regulatory action, which will have the impact, no matter what, of increasing the amount of allowable pollution, and also undermining the programs that all the auto companies have to achieve better fuel economy in their vehicles.

California has been and is ready to make adjustments in our program. And we have stated that publicly and privately, when we've met both with industry and with the administration. But unfortunately, we have not been able to find a partner to engage in that kind of a substantive discussion.

and the comment period has closed officially now.

Although, there's a period of months where the agencies are working on their final rule, where without being part of the formal record, there are opportunities to speak to agencies and others about what's going on. But if -- as

we anticipate the rule comes out, either later this spring or in the summertime, along the lines of what the administration has said they are intending to do, we are going to have a situation in which California will once again be enforcing our standards while the federal government is enforcing their standards. Separately, there will undoubted be -- undoubtedly be litigation. There will be a period of confusion, probably uncertainty about which standards are applicable.

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We understand that industry intends, by and large, to proceed as they would have if this had never occurred. In other words, if there were no changes, they still want to continue to work on increasing fuel economy. But unfortunately, all of the fundamental models and findings that we base our actions on will be called into question if the rules change. And I know that many people are beginning to start to look at what the impacts of that could be on things like federal highway funding, and conformity determinations and so forth.

And I think it is important that as we begin to figure out what those questions are, that we are articulate them to our leaders in Washington, so they understand what the implications of all of this might be.

The other update that I wanted to give you that has occurred since our last meeting has to do with the

discussion about the Sustainable Communities Progress
Report known as the SB 150 report. Last month, the Board
heard a presentation from staff that recommended some next
steps in light of that report. Many of my Board members
commented on the important role that all levels of
government and local government, in particular, play in
decreasing transportation emissions.

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Board members discussed opportunities to further incentivize local governments who are getting it right, and to encourage other local agencies to get more engaged. Many Board members also commented on the importance of interagency collaboration. I think that these joint meetings, such as the one that we're having here, can play an important role in helping our agencies work together in giving our staff direction as to -- and places in which we want to see them working together and identifying opportunities to do even more.

One example that was recommended in the SB 150 report is the collaborative production and implementation of a new State Mobility Action Plan for Healthy

Communities. At the CARB March Board meeting, we agreed with this recommendation and approved a resolution expressing our support. The resolution also encouraged

CARB staff to consider new pilot programs that advance access to clean mobility, especially for priority

populations. These pilot programs will be integral when it comes to the topic of innovative mobility, which is our focus today.

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It will be important for our agencies to learn what we can do to encourage innovation in mobility that improves transportation options while decreasing congestion, which, of course, is very costly both to the -- our economy and to our health, and also decreasing emissions and advancing equity and health.

I'm eager to hear the input that we're going to have today from our speakers that have been assembled. I want to particularly thank our staffs, both Executive Officers and our Board Member Sperling for the work that they did in putting together today's agenda. So that's it as far as -- as far as updates from me.

And I would now like to turn the program over to Fran to provide any updates from her Commission or to introduce staff or whatever else she'd like to do.

CTC CHAIR INMAN: Thank you, Mary.

So just a couple quick comments from me and then I'll let Susan give our update. But I do think this SAFE Vehicle Rule to really come together and figure out what in the world it might mean and how best to make sure that we can navigate as efficiently as possible through. I think we have a lot more touchpoints where we might run

into this than we even realize in terms of our transit, our streetcar, you know, name it. You know, I think just about everything has a potential to be touched.

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I saw a list of the exemptions, but it seemed like a pretty short list. And I think for all of us with the SB 1 funding that we are trying to deliver to our communities and to -- also, the work that we're doing on the AB 1282, which is the efficiency work group of really trying to have our agencies come together. And I was very encouraged at our last workshop, in terms of the progress that we've made to figure out how we can all work a little more simultaneously and integrated than in the past, and I think for all of us.

So we've asked our MPOs to really help us all identify the list, as best they know it, of what the impacts might be. I believe it's kind of a two-pronged issue. As Mary and I were talking earlier about this nebulous rule, I'm not sure what's going to happen with the truck rules. We were supposed to be working on some heavy-duty CAFE standards. And so I don't know. And maybe, Richard, you know where that might be. But it sounds to me like that might be a little disruptive, or this SAFE Vehicle Rule, if that's the right name, might be disruptive to the progress that we're trying to make on the heavy-duty standards.

And then also, as the waiver, which we haven't needed because we've been aligned, but we would need and what would happen, I think we could all be kind of in the desert of not having the tools that we need with the modeling and everything.

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So I think for all of us to really -- I don't know if it's a side-bar workshop where we talk about this. You know, I think we've had mention of it. I can tell you in the Southern California region, it seems to me that most of our talk in our discussion has been around the 2023 deadline, when we knew. And I don't think a lot of people were really looking at this infamous August 3rd deadline. And that is really just around the corner for all of us.

So I -- we can talk more about how best to get across the goal line. I'd be the first one also to say who else in the U.S. is going to have this problem. You have to be a non-attainment area, I think, to be struggling. So unfortunately, I believe we have the corner on that market, not the list you want to be on the top of, but I think we're there.

So I would just really encourage us all to see what we can do quickly. I know the comments are officially closed, but I'd say let's comment anyway. And I think as we look at housing, I worry that, you know,

we're desperately trying to solve our housing crisis in the State. And clearly, we have impacts with the -- there is the nexus with transportation and housing. And I think this could really be some handcuffs that we don't necessarily want to be operating with.

And so with that, Susan, I'd like to ask our Executive Director to give an update.

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and Board members, I wanted to just update you on two major areas that the Commission has been embarking on since our last meeting. The Commissioners -- every -- every -- with every funding cycle, we move forward on the next funding cycle -- the next cycle of funding. And we do that by revisiting our guidelines that are used. These guidelines are used to not only inform the projects that are selected for funding, but the manner in which the Commission will administer those projects funding and report.

And so we are embarking right now on developing guidelines for three competitive programs. One is the Solutions for Congested Corridors. That program is \$250 million annually. It is designed to achieve a balance set of transportation, environmental, and community access improvements to reduce congestion throughout the state.

The other program is the Trade Corridor

Enhancement Program. That program provides 300 million of State funds a year. There is federal funds in this program as well. And this program I believe, you know, we have such major air quality issues with regards to our transportation program, our goods movement program in the state.

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This program, the Commission is informed by the guiding principles that are in the Sustainable Freight Action Plan, as an example of one of the areas that the Commission does look to when determining projects for selection of funding.

The other program is Local Partnership

Competitive Program. This program actually -- the Local

Partnership Program is 200 million annually, but the

Commission has made a decision in the past to program

these funds 50 percent through a formula and the other 50

percent through a competitive process.

That formula will be relooked at as the Commission embarks on updating the guidelines for the program. And I guess what I would want to share with the Board members -- commissioners know this. But one of the key -- there are a few key focus areas that we're looking at revisiting in these guidelines. We always look at, you know, what did we do well, what can we do better?

But looking at improved performance metrics, not

only on the front end, how do we better evaluate projects that are proposed for funding, and then at the back end how do we improve the reporting for the projects when they're completed. We're looking at metrics related to reductions in vehicle miles traveled and greenhouse gases, with the overall ends towards implementing and moving forward the implementation of the Sustainable Communities Strategies.

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And so the Commission has kicked off several workshops in the north and the south. And I wanted to thank the Board. We have, at least the Northern California workshop I did see staff from the Air Resources Board. And we're grateful for that. And we hope that your staff will be able to participate in these workshops moving forward.

The other program that we are developing guidelines for is the State Highway Operation and Protection Program. And that is really the program designed to rehabilitate and preserve the State highway system.

But the workshops will continue through the summer. The goal is that in the fall, the Commission will adopt the guidelines for these programs and issue a call for projects to fund. I also wanted to mention that we are planning to hold a overview of transportation funding

workshop that's open to everyone - anyone that wants to attend - to learn a little bit more about transportation funding. The workshop will be held in Sacramento on April 30th.

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And then lastly, I wanted to give you an update. The Commission did adopt a -- another cycle of Active Transportation Program funding. This is the program that is designed to increase walking and biking. The Commission, since its exception -- inception of this program, the Commission has dedicated funding to over 800 active transportation projects throughout California, over 400 safe routes to school projects. Over 85 percent of the funds have been directed to projects that are expected to provide benefits to disadvantaged communities.

But in January of 2019, the Commission did adopt a set of projects for the statewide and small urban and rural components of this program, dedicating over \$280 million to 60 projects. And we are planning to adopt a program, projects for the Metropolitan Planning Organizations. The total funding pool there is 175 million.

So Commissioners and Board members, that concludes my report.

ARB CHAIR NICHOLS: Great. Thank you very much.

CTC VICE CHAIR VAN KONYNENBURG: Madam Chair.

Madam Chair?

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ARB CHAIR NICHOLS: Yes.

CTC VICE CHAIR VAN KONYNENBURG: Just following up on your opening comments.

ARB CHAIR NICHOLS: Yes.

CTC VICE CHAIR VAN KONYNENBURG: I would hope there would be a time to ex -- that your staff could expand on your comments related to --

ARB CHAIR NICHOLS: Yes, I was just about to -CTC VICE CHAIR VAN KONYNENBURG: Oh, great.
Fantastic. Thank you.

ARB CHAIR NICHOLS: -- go to our Executive Officer, Mr. Corey.

CTC VICE CHAIR VAN KONYNENBURG: Thank you.

15 ARB CHAIR NICHOLS: Thank you for that set-up.
16 It's perfect.

So Richard, would you like to expand a bit on what's going on on the standards, and also address the comment that we heard from the Chair about what might happen with the heavy-duty issues.

ARB EXECUTIVE OFFICER COREY: Yes. So with -first, with respect to light-duty and the rules from the
Trump administration, which have been -- very clearly
signal an intent to rollback the stringency, as well as go
after California's authority. One, there are GHG

implications, but there are also criteria pollutant implications. Pollutants that contribute to the formation of ozone, as well as PM2.5 in South Coast as well as the valley, because of the displaced zero-emission vehicles, as well as the increased refinement of petroleum. That is the issue in terms of the traditional planning and underlying analysis that was done in the SIP, did not -- basically it accounted for a full implementation of this rule. So a scale-back of the rule would have implications, not just with respect to GHG emissions, but criteria pollutant emissions that have a direct bearing on our attainment demonstration as embedded in the SIP. So that's the connection.

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But to Chairman -- Co-Chairman Inman's point about heavy-duty, we do have both phase 1 and phase 2 heavy-duty GHG standards. Those have been adopted. They have not been proposed for challenge. They are being implemented.

But what I think you were specifically referring to, and this is equally important, is the SIP also called for us, California, to develop lower NOx rules for heavy-duty on-road diesels, which basically are one of our largest categories. We don't get to our health-based air quality standards without tighter NOx standards or our PM2.5 standards. They are critical to both South Coast

and San Joaquin attainment demonstration, so we are actually in that rulemaking process and doing so in collaboration with a number of states across the country.

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EPA has also indicated an intent to move forward on those rules. But they have not been quick to get out the gate, and we aren't waiting. So we are working with OEMs, automobile -- truck manufacturers, states, local air districts, and others.

And just to kind of put a point on why this is so important. The transportation sector represents 50 percent of our GHG emissions, 80 percent of our NOx, and 95 percent of our diesel PM emissions. We don't get to our health-based air quality standards, or our local protection near ports, railyards, and others without a significant transition to lowest NOx where we can, zero where it's viable. And that also requires clearly close collaboration with our -- with infrastructure and infrastructure related partners.

ARB CHAIR NICHOLS: Okay. Thanks. I know there's a lot more to discuss about this issue. And I am going to suggest in response to the earlier comments that we perhaps jointly, if we can do it without too much — too much difficulty, organize a workshop that we would open up to local agencies and to MPOs and others, anybody actually, who might be interested to have further

discussion about what all this means, what the implications might be.

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CTC CHAIR INMAN: Thank you. Yeah, I think time is probably of the essence, so --

ARB CHAIR NICHOLS: Yeah. So we'll try to do something informal.

CTC CHAIR INMAN: -- however we can be nimble.

Yeah. I think my Vice Chair actually had a question. Did
you, Paul?

ARB CHAIR NICHOLS: Yes, please.

CTC VICE CHAIR VAN KONYNENBURG: I was wondering if we could get some illumination on the Sustainable Communities Strategy Program and Evaluation Guidelines from -- you know, where are we at with those, tell me -- staff is developing new metrics and new -- on -- and evaluations. What's the timeline of that? How is that going?

I know there's quite a bit of concern within the municipal planning organization community on that. And I'm concerned that many -- at the end of our meeting -- joint meeting in December, a lot of concerns were expressed. And I'd like -- you've had now several months to formulate a response to those concerns. Do we have -- do you have a response on those issues?

ARB CHAIR NICHOLS: Well, we had a discussion

about this at our March Board meeting. It was a publicly noticed session, and we had quite a bit of input at that point. I don't know if there's more going on.

Mr. Corey.

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ARB EXECUTIVE OFFICER COREY: What I would add on that is that the guidelines -- the updated guidelines have been worked on for about two years. The March 2018 Board meeting, when the Board considered the updated SCS targets for a number of MPOs for the 2035 standard. Part of that conversation really revolved around -- and we had a number of MPOs actually attended -- many attended and testified at that hearing.

It was really focusing on strengthening the tracking, the reporting, the touchpoints in terms of progress relative to plan. And the Board acted on a resolution at that Board hearing, so more than a year ago, to update the guidelines and strengthen them with respect to tracking, reporting, transparency in terms of documentation, progress against plan.

Since that time, there's been, I'd say, 10 -- a total of 10 workshops, three webinars, a draft posted, public comments, public comments responded to. So the guidelines were since revised and are posted, so reflecting that entire process.

If there are still concerns with respect to MPOs,

I'm certainly interested in having that conversation. But they've gone through a fairly extensive process to get us to this point of the guidelines being revised and posted.

CTC VICE CHAIR VAN KONYNENBURG: Okay.

ARB CHAIR NICHOLS: Okay. I'd like to return us to the agenda, if I may.

We are beginning today with a presentation on automotive -- Automated Vehicle Principles for Healthy and Sustainable Communities.

This presentation is going to be given to us by Chris Ganson who is a senior planner at the Governor's Office of Planning and Research, and I believe was instrumental in developing this report. And so I would like to invite him to come forward and begin his presentation.

Mr. Ganson.

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(Thereupon an overhead presentation was presented as follows.)

MR. GANSON: Thank you, Chairman Nichols, and everybody. Thanks for having me here today to talk through these. I want to spend just 10 minutes talking through again the Automated Vehicle Principles for Healthy and Sustainable Communities. But I think that they could be AV principles for functioning of the transportation network and the economy just as well. There's quite a bit

of overlap here in what we'll need to do to land these in a way that benefits all of our interests.

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MR. GANSON: So thinking about the arrival of automated vehicles, it's real easy to think about the benefits to each of us. I mean, I certainly think, well, I could get work done on my way to work, or maybe even catch some extra sleep if my commute were long. I could send a kid to a charter school across town. That one that I wanted her to be in, now that I can send her in the vehicle and don't need to take the time myself. I could save time myself with an elderly relative bringing them to the hospital for a doctor's appointment.

So there's these -- these real benefits that automated vehicles will bring, and that's to a whole array of the population. And many of them have us in vehicles more and going further in them. And we oftentimes don't think for a little while at least about that everyone else will also want these benefits as well, and create that extra vehicle travel as well.

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MR. GANSON: And that could lead to some big collective action problems, traffic on the highways, traffic on surface streets for that matter, emissions goals, other goals around environment, health, et cetera.

So we're beginning to know -- have some rough ideas at least of what this may look like. We have level 2 automation out on the streets today, Tesla Autopilot, for example. And we know that these vehicles are being driven more than, for example, Teslas without Autopilot.

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There are also people driving these with autopilot are inserting themselves more readily into congestion, and thus disproportionately adding to congestion compared to other vehicles.

We have -- through the research community, there's been quite a bit of thought put into these -- this set of issues. And we see modeling exercises that show substantial increases in vehicle travel. We also have our first empirical study out now. It's just preliminary, but it's showing -- it used a chauffeurs as a substitute for automated vehicles to see what people -- how their travel behavior might be.

And the numbers are small so far in this study, so this is preliminary. But traffic almost doubled, an 83 percent rise in vehicle travel. That's beyond what our roadway -- far beyond what our roadways would be able to accept and still function, also far beyond what our climate goals and other environmental goals would be able to accommodate.

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MR. GANSON: So with these big changes in travel behavior in mind, folks at the State gathered from a number of different agencies to pull together the kind of what should we do, what are the -- and starting with what are the principles that we should bring to the table in order to land these vehicles in the public interest broadly.

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So I'm going to run through these with you fairly quickly. They're on the OPR -- you can find them on the OPR website. I believe there was a handout today as well, if you want to look at them in more detail.

The first of these is that they be deployed to the maximum extent possible as shared-use vehicles, kind of the Lyfts and Ubers, but automated. And this creates -- this creates a number of benefits, but not the least of which is it facilitates the second principle, which is pooling, getting more than one person into a vehicle.

Sharing use and pooling are the keys to having these vehicles land in a way that works for traffic for sure. And with the third principle landed as low or zero-emissions vehicles, they can actually benefit both our transportation system function goals and our environmental goals, particularly our greenhouse gas emissions reduction goals, and substantially if there is

strong coordination.

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There is widespread agreement among the transportation expert and research community that these are not likely to happen on their own, that these approaches will need a policy to reinforce them and guide them.

And the research community has begun to use really strong language for researchers, for academics.

Academics aren't normally talking about outcomes in terms of heaven and hell scenarios. But in the realm of automated vehicles, we're hearing that and have been for a couple few years now. So there's a real opportunity here to have things go one way or the other, again for the whole array of our interests.

Vehicle right-sizing will be important. Instead of owning that F150 pickup truck, because you need to get lumber at Home Depot once every couple months, you could summon one if we are in a shared-use environment when you need it. And when you just need to get across town for a haircut, you can get the small electric POD in theory, but when you're no longer needing to hang onto a steering wheel and look out the front -- the windshield of the vehicle, you might find yourself wanting to do other things, like maybe exercise or sit on a really comfortable sofa and watch a big screen TV. And these vehicles could

go the other way. They could become bigger than today's vehicles. And that would have consequences both for environmental outcome and for traffic, because you can get fewer vehicles through an intersection when they're big.

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It's important that we think of these as part of an efficient multi-modal system, not that automated vehicles will come and supplant everything we have, and carry us around everywhere. We're not going to get everybody into downtown San Francisco or even downtown Sacramento in automated vehicles on the roadway.

We're going to need transit to play a part, and we need active transportation to -- active transportation to play a part for a number of reasons, including its relevance to human health.

So having these vehicles rather than run parallel to line-haul transit, BART, Light Rail, et cetera, having them be -- increase the catchment area of stations and drop people off at stations, and make better use of these transport -- these transit investments will be important.

However, in the suburbs perhaps or areas where you see three or four people in a bus that comes once every hour or 90 minutes, these vehicles will probably do a much more efficient job of getting people to places, creating better access to opportunities, saving money, and reducing emissions, if they can replace that sort of

subsistence or less efficient transit.

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There's a real opportunity with the control that we will have over these vehicle's behavior to make folks who are biking and walking feel safer. And that in turn has a real opportunity to create more cyclists, to bring more people into biking and walking. That, in turn, has enormous potential health benefits, as well as the emissions and other traffic benefits.

And last but not least, as part of the efficient multi-modal system, freight delivery needs to receive a lot of thought. There's a real potential for delivery, as is already happening in Amazon -- in this Amazon world to get delivery vehicles to actually make more efficient use of transport to get goods to people, than us driving our own automobiles out shopping.

However, if we can push a button and get a good to come to us in 20 minutes, and everybody does that all the time for each good, we are likely going to be sitting in the traffic created by each others goods traveling on the roads with us.

Efficient land use will need more attention than it has before. It will be awfully easy for people to think, well, why wouldn't I go off and live in the foothills on a 5-acre plot of land, because I can sleep or work on my way into town. And that loading our roadways

up with a lot more vehicle travel, harming our environmental goals on a number of fronts, but also taxing our transportation infrastructure.

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These vehicles are likely to use less space, largely because of the less need for parking, but also because a less need for -- less need for width of right of way. And that creates some opportunities to do better on complete and livable streets, create places out of our thoroughfares.

And last, but very much not least, we need to think about equity very carefully, as these are -- these vehicles are deployed through two sides -- two facets to equity here. One is the impacts these vehicles will have on neighborhoods and people. When I take my automated vehicle downtown to go to work and then don't want to pay the \$20 parking fee, but send it off to the nearest neighborhood with free parking, whose neighborhood is that, and who is suffering the burden of the additional vehicle travel?

And another important facet is, of course, how can people get around at a variety of -- a variety of people, neighborhoods, and income levels. Do we end up creating -- creating really good and easy transportation reporter for wealthy folks and a system that doesn't -- doesn't provide that extra benefit for lower income folks.

Just an example to leave you with on this front. If you and I get stuck in a traffic jam in an automated vehicle, we're probably going to pull out our laptop and get some work done. If you are a hairdresser, or a welder, you're stuck in that same traffic that we've created by being willing to insert ourselves into congestion, but without the ability to make use of that time, make economic value out of that time.

So those are the principles. There is a lot of work to do, of course, in bringing these principles into policy and ultimately landing these vehicles again in the public interests and the array of interest that we bring to the table.

But I wanted to share those with you here and hope that they make for good discussion for the rest of your meeting.

Thanks.

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ARB CHAIR NICHOLS: Thank you. Before you leave, could you just take a moment to give us a little bit of the background as to how these principles were developed and what kind of input you had in doing it?

MR. GANSON: Yeah. Sure. The -- they -- they were collected, I would say, more than developed by the Interagency Working Group. So we have a broad -- the list is on the back of the principles themselves, so you can

take a look at which entities were involved, but quite a number of people at the table. But ultimately, we were participating in venues like Dan Sperling's Three Revolutions conference, going to transportation research board meetings, getting to -- getting the thoughts of the thinkers and the academics in this space.

And there are similar lists put out by other organizations. But we thought it was important to collect them in one place for the state.

ARB CHAIR NICHOLS: Thank you.

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We are going to be moving on to a panel that's going to further expand on some of these comments, I think, but it's -- I thought it would be useful for people to hear what work had already gone on under the auspices of the Governor's Office.

CTC CHAIR INMAN: Madam Chair?

ARB CHAIR NICHOLS: Yes, go ahead.

CTC CHAIR INMAN: Do you want questions now or --

ARB CHAIR NICHOLS: We were going to wait until we'd been through the full panel. And then they'll be here and we can then have the discussion among us all, if that's okay? Because I think everybody undoubtedly has thoughts, questions, and comments that they'd like to bring up.

So I'm going to move now to the next item, which

was -- this was kind of a precursor for -- at the conclusion of the December 4th joint meeting, Professor Sperling offered to collaborate with CARB and CTC on a series of roundtables that would cover various transportation topic.

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Since then, the University of California's
Institute of Transportation Studies has hosted four
roundtables focused on innovative mobility. Professor
Sperling is going to synthesize some of these themes,
challenges, goals, and strategies that emerged from the
roundtables, and then engage a panel of experts in a
discussion.

So I would now like to invite him to begin his introductory remarks.

ARB BOARD MEMBER SPERLING: Thank you. Thank you very much. It's a pleasure to do this and to participate and support this process.

So this is the third meeting we've held. We've heard from many government leaders. We've heard from NGOs, industry, a lot of different stakeholders. And I think we've made some progress in appreciating the different responsibilities and the different missions, and even the different cultures of the Air Resources Board and the Transportation Commission.

I want to highlight a set of themes that have

came about partly through those roundtables, partly through other discussions that I'm going to come back to. And those themes are innovation, working between -- State leaders working with local stakeholders, experimentation, and linkages between transportation and housing. And I think those are the foundation for us to be moving forward.

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So I am -- what I'm going to do here is identify some key strategies and actions that I think the two agencies could do together, what they might do on their own, or might even inspire others to do. And I'm also going to address some actions that the UC Institute of Transportation might do some in supporting these initiatives.

Okay. So the starting point here I think is that the world of transportation is being disrupted. That's a fact. And no matter what CTC or CARB does, there are going to be major disruptions. And, in fact, there already are. You know, the first one has been the taxi industry. Airports are being affected. Transit is being affected. So there are major disruptions already happening, and it's going to accelerate in the future.

So we're focusing today here in this session on the many new innovations, the new technologies, the new business models that are becoming available and becoming utilized to enhance the transportation sector, in terms of economics, in terms of environment, in terms of equity.

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And the goal here, I think for all of us, is to how do we steer these innovations toward the public interest?

So we just heard from Chris Ganson about the automated vehicle principles that were adopted by a committee of State agencies. And let's look at that as one building block. Another building block has been these roundtables that Chair Nichols referred to. There were four of them held around the state. They were organized by the University of California, but in consultation with CTC and CARB.

These roundtables were in Sacramento, Fresno, the Bay Area, and San Diego. There were 62 attendees, and these were all leaders. And they came from a mix of Legislature, regional governments, locals, transit, industry. And I would note there were two CARB Board members that attended and three CTC members that participated. And Laura Podolsky, who's on the panel and really played the lead role, she'll talk a little bit more about that.

Now, I want to acknowledge that CTC and the broader transportation community do have a different focus in addressing transportation challenges than does CARB and

the environmental community. But I'm going to argue, and I'm going to try to help lead us towards an insight, that these similarities -- that the similarities between them are more than enough to serve as a foundation for moving forward together.

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So let me suggest that we're all committed to a better transportation system. Okay. So that can be one premise that I think we can all agree to. And better, as a said earlier, that means in an economic sense. It means in an equity sense. It means in an environmental sense.

And we all agree that we can improve our transportation system. And I think I would argue, and hopefully others will agree, that we do have major shortcomings in our transportation system. So we can do better. So let me just run through some of these just really quickly. I don't want to quibble about the details of it, but I think there's strong facts underlying this.

Okay. So first of all, the fuel tax is becoming increasingly unreliable as a source of funding for transportation, and going to become increasingly obsolete as we go into the future.

Number two is transit is losing ridership.

Number three is traffic fatalities are very high, and they're flat or even increasing for the first time in many decades.

Another is that congestion is increasing.

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Another is that housing is expensive an in short supply, and it's increasing the cost of transportation for users, for infrastructure suppliers.

Another fact is that many people, a large proportion of people, have poor accessibility, what we sometimes refer as disadvantaged communities, but, you know, that includes physically disadvantaged, economically.

Another is that greenhouse gases from transportation are rising, unlike the other major sectors.

And then there's a whole nother set of issues with freight. And I'm going to not focus on those. I think those are so important, that I'd like to move those to a future meeting, either formally as part of this process or workshops, and try to stay a little more focused on the passenger side for now, even though they are, of course, related.

So -- okay. So what are some overarching goals that we can all agree on?

Number one is that we really do want to reduce the cost of transportation both to users and to the infrastructure suppliers.

Number two is we really want to increase accessibility by all of the mobility disadvantaged. And

that's not just an equity issue, but it's a jobs and productivity issue for our economy.

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We want to reduce fatalities and injuries.

We want to reduce greenhouse gases and air pollution. And part of accomplishing all of those is I think we can all agree that, at some level, we need to do a better job of aligning transportation goals, social goals, and environmental goals. And when I say that, that includes jobs and housing as part of that.

So I went and dig -- dug through, you know, some of the CARB and CTC staff reports. And I found like that there's actually quite a few commonalities. So the CTC annual report to the Legislature has a recommendation, number 3, is updates State statutory requirements for the California Transportation Plan and regional transportation plans to address the forecasted impacts of advancing technologies in climate change over the 20-year horizon. Dedicate additional planning funds for these purposes.

Goal number four was create a technical advisory committee to encourage the development and deployment of advanced transportation technologies, and to provide expertise, and to standardize communication technologies for the transportation sector.

On the CARB side, going back to that 150 report, it said, recommendation number 4, pilot test innovative

ideas to speed the adoption of clean efficient transportation solutions.

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Solution number six, complement development -complement deployment of new mobility options and
technologies with policies supporting State environmental
and equity priorities.

Convene a transportation system think tank to provide insight into the demands on the future transportation system.

So -- okay. So we get to the question, what can we agree on in terms of moving forward?

And that is the focus of what the discussion we want to have. So as I said, a future -- this future that we talked about, this disruptive future is coming, no matter what we do about it. We could do nothing and it's going to happen.

And so we're seeing that there's many decisions being made, many investments being made. But it's being done in a very ad hoc fashion. There are many new bill -- if you go to the Legislature, there's all kinds of bills that deal with land use, automated vehicles, shared mobility, and how they relate to housing.

If you go to the agencies, there's a whole -State agencies, there's a whole slough of investments, and
actions, and decisions made that affect all of these --

all of transportation in a lot of different ways, and regional and local governments also.

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So the bottom line is that regardless of what we, CARB and CTC, talk about, there are going to be many initiatives, laws, regulations, funding decisions, and incentive programs moving forward, as I said, on land use, on housing, on transit, on automated vehicles, on road pricing, on shared mobility companies.

So the heart of this discussion is not about -necessarily about agreeing on where we're headed, but it's
rather agreeing that the future of transportation is
coming, is changing, and that we have a very important
role to play in that.

So let me suggest a set of questions that we could --

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ARB BOARD MEMBER SPERLING: -- use to frame the discussion here, and -- both for our panel and for the Commissioners and Board members that we can -- as we go forward here. So remember, we're going forward, one way or the other. Let's do it in a better way than a worse way, okay?

Now, we can all have our definition of what's better and what's worse. But clearly, there are a lot of big changes coming, and that we really need to focus on

it. So that -- the number one, I think, as we -- as we as a group -- our two agencies, as we think about what our role is, one of the very most important, I think, is to be thinking about how do we at the State level work with and relate to local governments and transit agencies.

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Because so much of what we're talking about is shifting. The responsibilities, the oversight, so much of it is shifting to local governments, but yet, we have larger public interests at stake here.

So as you see there, you just have a few things. You know, how do we link State and local initiatives? Is there some kind of technical assistance? What are programs to support local experimentation? And I think that's another really big theme that we really need -- we can agree on, should agree on, and should think about how to pursue it, because so much is new. We don't know what the real answer is. We have ideas at the -- you know, whether we're experts or political leaders.

And so the more we can do to support experimentation and learn from it, whether it's dealing with, you know, these, what we call, microtransit or what we -- shuttles or, automated vehicles, or infrastructure, or pricing.

Okay. So number two up there is -- and this is important on many levels, how do we support housing goals,

because transportation is closely linked with housing.

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And so what do we do about that. And it does get into a lot of local issues, in terms of infill development, land use, access to transit, accessibility by the mobility disadvantaged. Okay.

So what I'm doing here, by the way, is I'm setting up four, I think, big strategies issues that I want us all -- you know, I'd like all of us to think about. And if you want to come up with new ones, that's great. We're going to have the panel also addressing these.

So the third one up there is probably the most controversial of them. And that is, as we go forward, we are -- it's almost certain that we're going to be used more -- using more pricing in the transportation sector, local pricing. You know, maybe it will be cities, maybe it's congestion pricing, road use charging. And the question is -- and then a lot of cities are putting fees on Lyft and Uber. That's what TNCs are up there.

So pricing is almost definitely going to be happening. And the question is, you know, how do we unfold that? Is it purely just to raise revenue or are -- can we use it in other ways, or should we use it in other ways as well?

And the last one, which is one the transportation

community and -- especially embraces, is the cob connectivity between vehicles and the infrastructure for safety reasons, for efficiency reasons. And that definitely is happening too, and that can happen in different ways connected up with these others.

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So with that, can we pull -- call up the panel?

Do I do that? Am I that powerful?

ARB CHAIR NICHOLS: Your job is to run this panel.

ARB BOARD MEMBER SPERLING: All right. Okay. Panel, come on up here.

ARB CHAIR NICHOLS: And I know we do have time concerns, both in terms of the overall time for the meeting, and also because we're -- we may lose some people, if we don't move it along.

ARB BOARD MEMBER SPERLING: Right.

Okay. So what we're going to do -- so I'll introduce each of the four very briefly. And I have a few questions for you.

I'd like to open it up. And I think if it's okay, after that, if the Commissioners and Board members, you know, might -- I know that one time constraint is we have Kate Gordon and we want to make sure -- she's going to be speaking at the end of this, and so we'll make sure we have enough time for that, but --

ARB CHAIR NICHOLS: Okay.

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ARB BOARD MEMBER SPERLING: Okay. SO we have Dara Wheeler on my left. She's Head of Research for Caltrans. And she's been at Caltrans. She was Chief of Staff. And before that, she worked at Office of Planning and Research, and in the Legislature.

We have Alvaro Sanchez. He's the Environmental Director for the Greenlining Institute.

We have Laura Podolsky, who is the Assistant Director for the University of California Institute of Transportation Studies that managed and oversaw those roundtables.

And we have Tilly Chang, Executive Director of the San Francisco County Transportation Authority. And before that, she -- she's worked at the World Bank, the Metropolitan Transportation Commission, and a technology start-up.

So we have a really good diversity of abilities and experiences here.

So let me start out with a question. And that is, you know, as I -- as we -- you know, the goal of this is to -- who do we move forward, right? So what do you think are strategies that are most important -- that should be the most important to CARB and CTC? And for those, what actions within those strategies do you think

individual Commissioners or Board members might or should act upon, either as a group or more individually?

So you don't have to all answer it, because I've got more questions for you, but -- Dara, you want to start out. You -- I see a big smile on your face like you have a good idea.

It's up on top.

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MS. WHEELER: There it is. There it is. Thank you, Professor Sperling.

First of all, Director Berman sends her regrets for not being able to join you today at the conversation, and has asked that I try to inform as much as I can and take back what I can as well.

So to answer your question, CARB, CTC, and Caltrans obviously have different missions. And those missions overlap in many ways, especially when it comes to system efficiency and air quality concerns. So we feel that we should continue to leverage cross-agency research efforts and findings where the topics are of mutual interest.

And a couple of ideas related to actions to achieve that are continued coordination through the transportation research round-up group. And CARB and CTC could help influence and establish topics of mutual interest to focus the effort across departments, and

additionally to work on a statewide transportation research databases, which was mentioned in the CTC annual report to the Legislature.

So thank you.

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ARB CHAIR NICHOLS: Okay. That's a great start. Alvaro, you all got some good ideas?

MR. SANCHEZ: Sure. Hi, everyone. Thank you for having me.

And, you know, I think it's to make the problem bigger, because the solutions are going to be so much more difficult to achieve. And I think this is a really good start, right, to be able to have these conversations, to be able to have cross-agency collaboration. And when it comes to issues of autonomous vehicles, you know, we're talking about employment, about health, about land use, about housing, about safety.

So I think that having a robust conversation that even gets more complex -- I know this one is already very complicated. But that's, I think, the degree of the challenge that's in front us, but also the opportunity. The opportunity to really come up with some innovative solutions to be able to advance our goals, social equity goals, climate goals, and otherwise.

And I think, you know, just finding the level of both continuing to do the work that's in front of us that

we have to do, but also being flexible enough to be able to say, ultimately, we're all here for the same purpose, and we want to have a better transportation system, and we want to address the inefficiencies and inequities that we've built into our system that we currently have.

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And I think that that's a level of collaboration that we need to be able to instill in a process that unfortunately, in my opinion, gets more complicated on the short-term, but really pays off in the long run, in terms of what we can achieve, if we bring other folks to conversation that need to be here as well.

ARB BOARD MEMBER SPERLING: Great.

MS. PODOLSKY: So from the uni -- the perspective of the university -- so the UC Institute of Transportation studies organized these four roundtables to really go meet with stakeholders on the ground to understand their challenges, and how it mapped across what we saw as some big glaring gaps in the data and information we will need to inform policy.

And so internally, so among the UC researchers, we identified nine areas that we saw that there was major, again, gaps in information and data, that we knew that would be important to the State moving on. And we presented those and shared those at the roundtables.

At the roundtables, we also presented three

actions that we were suggesting to the State. And the first one was just to create a framework -- a strategic framework of where the State was going. And there was -- actually, that was one of a theme that we talked a lot about at the roundtables, where the locals, regional agencies also saw a lot of value in that. So not only a framework that could help link agencies up and down the government ladder from locals, region, and State, but across the State too.

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So, for example, DMV is working on its third set of regulations around AVs, total absent of any other direction that the State has on AVs. So they are moving forward setting the policy of the State on AVs, the DMV. And there's a lot that's going on at the local and regional level. And what we heard a lot at the roundtables too is that it is really difficult for city by city by city to set standards and protocols for how you deal with all this data, how do you negotiate with the private sector. So they saw a lot of value in the state assisting and helping to create some protocols around that just to make it easier for locals and region to be working with the private sector.

Something else in the sense of what we heard a lot was support to the locals. And this is what Professor Sperling was saying too, is that there is now more than

ever access to a lot more data and information. But locals -- it's hard to know what to do with it.

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So once you've got it, that's one thing, but what do you do with it when you have it? How do you analyze it? So there was discussion on State support in helping locals figure out how do you work with this big data, how do you store the big data, who's there to help with the wig data? And we believe the UC ITS has a role in that as well.

So, again, one of our actions was this framework. What can the State do to help provide that framework? Assistance to locals, I touched on that as well. And the third was to really understand where there's gaps in information that we need and to invest in filling those gaps. So that was also one of our recommendations that came out of the UC ITS work and our roundtables.

The last thing I'll mention is that something that came up over, and over, and over again was the funding, and the interest to, and the importance of, aggressive, as one person put it, experimentation, and how do we support that? And that's another role that the State could play as helping to support that experimentation. But also it needs to be evaluated and results need to be shared with others.

And the other one I'll just mention before I turn

it over to Tilly, was just a funding over the long term. So as transportation gets more and more interesting, and there's more and more technologies, and automated vehicles, and the gas tax is becoming obsolete, you know, what do we do to replace that, so that we have the funding we need to run the transportation system of the future.

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MS. CHANG: Thank you so much for having me as well. Tilly Chang. I appreciate the opportunity and I just want to echo all the other commenters today, especially what Laura was just mentioning about the strategic framework.

What was nice about our roundtable in San -- in the San Francisco Bay Area that was hosted by MTC was this idea that, you know, 17 or some other number of states already have their frameworks. And it's Helping them to advocate to be part of the national conversation, whether it's the AV policy, whether it's the next transportation act, whether it's the research -- R&D agenda, California really has everything we need. We just need to put it in a place that is an articulate central locate -- place, where we can use that as a base for advocacy.

We're looking -- really looking forward to helping to develop that around new technology, in addition to just traditional transportation and climate policy.

Things that we had talked about, as Laura discussed

earlier, that echo some of the things that Professor

Sperling was mentioning are the land-use connection, the transit-oriented development, the infill.

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Sustainable Communities Strategies are happening. That's the good news. It's taken a few cycles of regional transportation plans and the SCSs. What's not happening is the funding to implement them. So whether it's the traditional things like safe routes to school and basic infrastructure that a lot of our sales tax counties and regions have some matching funds for, we're not able to show the cities that that promised incentive of, okay, if you do plan for growth, we're going to invest very strongly with you on the infrastructure side.

There is funding that is flowing from, of course, the Cap-and-Trade and the AHSC grants, Affordable Housing Sustainable Communities grants. Those are very important, but they're just not enough. So I want to echo coke that again.

Let's keep incentivizing communities for trying to do the right thing regarding planning for growth, transit-oriented development, and show them the benefits of that through the infrastructure and transportation investment.

Very importantly, transit, you know, active transportation modes continue to be oversubscribed. CTC

staff see this and have been reporting this the tremendous demand. ATP rounds, TFCA rounds, they're just oversubscribed. So we do want to just keep finding ways to leverage the funding that's available and to try and focus that on things that can be perhaps intersectional, which is what's so exciting about this panel -- or this joint workshop.

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What would that look like perhaps around experimentation? One of the things that I was pleased to do this past week with Director Berman, in fact, and others was at the ITS America conference, there was a mobility on demand convening in Seattle. And there was reporting out on the national sort of mobility sandbox. These are pilots around the country that have been able to harness innovation at the local level, in whichever way it fits your community, but to really report out lessons learned.

we're like in the third inning. We're very early, right, in this big transportation disruption and revolution. We do see the pilot funds flowing. The public sector capacity, as Laura mentioned, is really important to be able to invest in that. Some of the recent grant programs, for example, limit how much we can spend on the public sector side for evaluation, or staffing. I think

that's something to consider, because it does take all sides to be able to then shine a light on what was learned, so that we can improve and build upon the initial sets of pilots that hopefully are going to be forthcoming.

Thank you.

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ARB BOARD MEMBER SPERLING: Thanks. So Tilly kind of hit all of the key themes I was talking about. So let me ask maybe the rest of you to talk about what are some specific examples of local experimentation, and local needs that the State could support in some way, whether it's a new or expanded funding program, or, you know, whatever it is? So...

MR. SANCHEZ: Yeah. I think you're right.

We're early on. And one of the things that I would

mention is that when it comes to social -- to issues of

equity, we're even earlier than that. And a couple of the

programs that I'll emphasize are the Transformative

Climate Communities Program at the Strategic Growth

Council is one that I think has a lot of opportunity to

demonstrate some innovative ways to link all of the things

that we're talking about, housing, transportation, green

infrastructure, jobs.

It's a really modeled program, and one that very few people know about. It's doing tremendous things, and it could have -- it has the potential to be able to

integrate all of the things that we're talking about with social equity built at the core of that program. So it's one that I would really identify as needing more resources to be able to provide more funds to 14 planning communities that are doing the planning work with anticipation of being able to apply for funding for that program. But we need to increase the funding for that specific program to be able to make -- to deliver on that commitment.

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Another one that I'll mention is one that we're really excited that's going to be coming out. This s the Air Resources Board program on mobility pilots for low-income communities. We're super excited about the approach. That it's not just focused on the use of vehicles. It's also thinking about other forms of mobility, like e-bikes, for example, and to able to again rightsize and experiment with how to achieve this program and the goals. It's something that I think we're really excited about.

One that we're also really excited about that does the program around capacity building and technical assistance is a bill that we worked on last year, SB 1072, which creates the Regional Climate Collaboratives Program that has the goal of providing technical assistance and capacity building resources to local agencies and local

community-based organizations to be able to do something with all this content, and all this data, and all these funds.

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Because what we've noticed is that underserved communities, who should be able to benefit from a lot of what the State is already doing, just doesn't have the technical expertise, the local capacity building, and the local resources in terms of technical assistance, GHG quantification methodologies, et cetera. And that's really creating a barrier for them to participate.

And the last thing that I'll emphasize for these -- all of these three programs is that it really emphasizes addressing community-identified needs. And I think that's something that I just want to introduce to the conversation, that it really has to start there. If we build programs that are not aligned to addressing the transportation, or housing, or other needs of the communities that we're seeking to actually help with this work, we're missing the boat. It really needs to start with them. And they need to be much more meaningfully involved and participating in these processes in order to -- for us to align our strategies and goals to actually address the needs that those communities have.

I'll just leave you with this, there's a program.

I think many of you might know about it. It's called

Green Raiteros. And it's a program that was launched in Huron, California. And the need that they were trying to address there was trying to get senior citizens to go to their hospital appointments in Fresno, but couldn't rely on public transportation. So they ended up creating a car-share pilot using conventional vehicles to meet that need.

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Now, they've evolved that program to have electric vehicles provide the resource, but the need was the hospital visits. It wasn't so much a new transportation route. So identifying how to address those specific needs of communities with these transportation innovations, I think we really need to embrace that approach and really start with community-identified needs, and how do we address those short-term and long-term needs that people have.

ARB BOARD MEMBER SPERLING: Lots of good examples. So, Dara, I mean, you oversee a very large research program for the State. I guess, clearly the largest transportation research program in the State, now that I think about it, by far.

You know, what are some examples or what are some ideas you have about, you know, how Caltrans can play a role in this? I do know that -- I don't know about that Fresno example that Alvaro just did, but I know there's

others in the valley that Caltrans has funded fairly substantially.

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But what are some examples and do you think
the -- you know, we're do we -- does this have legs, this
whole idea?

MS. WHEELER: Oh, absolutely. And I feel that, you know, the beauty of going second and third in the lineup is we're going to be talking about the same thing, but it's already been said. And I just want to emphasize that the need for the additional funding to support these initiatives is critical to look at ways that we can leverage the State's investments to get out of policy what we need to get out of policy.

And I like what Laura was saying about the data, and where the university can help us drive data decision making a little bit better and inform policy based off of data. So, yes, this has legs. I think that we're talking about the same topics, you know, in all of our conversations across programs, so...

ARB BOARD MEMBER SPERLING: And so, Tilly and Laura, do you want to follow up on any other examples on topping of it to add to this discussion.

MS. CHANG: Sure.

ARB BOARD MEMBER SPERLING: Turn it on.

MS. CHANG: Other examples of pilots that are

happening, just building upon what Alvaro is mentioning, even today at my board we were able to put some lifeline transportation funds on things like paratransit plus.

What does paratransit look like in the future. You know, this is something that MTA our muni operator is leading, but it's in a new way serving the community in a flexible way, allowing taxis to provide up to \$75 per person to go to your hospital appointment or your pharmacy, with a the taxi being geofenced to just those destinations and not other locations.

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It's this new way of harnessing the innovation and technology, but really keeping that sort of community based focus on what is the actual need, what is the health care that's being accessed and for whom.

Some of the pilots that I know colleagues are doing around the region and the state really are exciting. Contra Costa just received a national grant that many agencies will be participating in to do integrated payment and integrated trip planing and payment apps for the 680 corridor. This is certainly something that will involve BART and MTC, which manages our payment systems in the Bay Area, and also our agency to the destinations in San Francisco for the 680 corridor. But it's really looking ahead to see what can we do to market to people to really speak to commuters in the way that they're used to being

spoken to in terms of being able to show you all your options, making it as easy as possible, providing sort of that one shop stop in a sort of integrated if Clipper and Fast Trak, you know, had a baby, and you could actually get credit for taking transit for the days that you might want to use an express lane and pay a toll.

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Those are the types of concepts that we're learning from partners, for example, in Los Angeles to say how might congestion pricing look in a place like San Francisco. Now, this is not something that many cities are looking at, but that's okay. I think other places are looking at other topics. We're looking at pricing. There's all kind of innovation and experimentation happening. We're all laboratories for this discussion.

Something that I thought was very impressive about actually going back to Seattle was when they close their Alaskan Way Viaduct, 90,000 trips, they actually had a very smooth experience, because the employer community was so involved early on working with Sound Transit in King County.

So we learned a lot about what the private sector can do beyond the mobility companies. The mobility companies absolutely need to be partners with us in achieving our goals around equity, and success, and climate, and congestion relief, but also other parts of

the private sector, developers, employers.

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So when we say the private sector, I think we mean many different players, and the public sector also meaning many different players. But what matters is not focusing on those organizations, these disparate players, but the people who we're trying to help, right? The community that is trying to access services, jobs, school, medical, and other opportunities.

MS. PODOLSKY: The one pilot I'll mention -- so it sounds with this panel there's a lot of funding that's going into pilots. And so one thing that CTC and CARB and -- is a part of this framework is just taking an inventory of what's going on and who's doing what. So I'll just use the one project I know of as an example of how pilots are being funded in a really interesting way.

So we have a researcher at UC Davis, Caroline Rodier, who's been working in the San Joaquin Valley for about three years now. So she partnered with the Metropolitan Planning Organizations there. They were funded through a Caltrans planning grant to look at different business models for providing rural transit that could leverage some of these new technologies. So transit was really expensive in these areas. And so that was the focus of the planning grant that they received from Caltrans.

Once they had that in place, they applied to a pilot program, a CARB program, to actually implement it. So actually take some of the business models that they developed as a part of that planning grant stage and to implement it. For example, purchase -- they -- one pilot that they're testing out is housing electric car share program at affordable housing units, that then also could be used for rideshare. So layering on top of that the ability for residents to be able to drive others around.

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And they're also working, as part of that pilot, with in San Stanislaus and San Joaquin counties on piloting this mobility as a service. So using technology to better route existing vehicles.

And then they also received a grant from the California Energy Commission to assist with this pilot in the communication engagement piece. So there is a lot going on. And I'll go back to, as an outcome of all these roundtables and discussion, what the UC ITS is committed to, and very interested in, is to help take an inventory of what is going on in the state, across the State agencies, but as well as in the region's locals, because that's what we discovered is that there is a lot going on and people don't know about it.

So that is something that we have talked internally about trying to come up with the resources to

support. And we would like to work. And that's an area that we would like to work with CARB, CTC, and others on is just taking a baseline of where we're at.

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ARB BOARD MEMBER SPERLING: Thanks. Let -- let me highlight a couple things from my fellow Board members and Commissioners of what we're hearing here. And then I thought we'd open it up to -- you know, to the commissioners and board members to ask the panel any questions they might have about this.

So, you know, you've been hearing a lot about that there's a lot of pilots, but the reality is there will probably be, you know, an order of magnitude more. You know, if you talk to the organizations that are setting these up, they feel like there's a tremendous need. If you talk to James Corless at SACOG or SCAG, a tremendous demand, because there is a lot of experimentation.

And I think it can be done in a much more organized way. And part of that is lessons learned. And I think that's kind -- partly where Laura was going is there's a lot happening, but we're not sure what we're learning from it, and we need to do a much better job of learning, so that we can scale up all these ideas.

So what you're hearing here is that for the first time in half a century, there's a tremendous amount of

innovation happening. This is really a unique time in history for transportation.

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So I've lived much of it. I come from firsthand experience that it really is different now, and it's both an opportunity as well as a risk.

And so that's one of the reasons why we're focusing on this now. And the other theme I think that I want to highlight that they -- that the panel was talking about is local stakeholders. In all of this, the local stakeholders are hugely important. And we've got to figure out better -- you know, kind of Tilly highlights that. We've got to -- and Alvaro also, we've got to figure out how to -- how to partner better and have a stronger collaborative relationship.

So let me open it up to any Board members or Commissioners to quiz our panelists.

ARB CHAIR NICHOLS: Dan, before you do that, I was under the impression that we had a special guest who had to leave early.

ARB BOARD MEMBER SPERLING: Right.

ARB CHAIR NICHOLS: And I just want to make sure she has an opportunity to interject here, because we invited here specially to hear from her.

MS. GORDON: No, I don't have to go till 3:15, so if you want to do some questions now, then I can weigh in.

after that.

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ARB CHAIR NICHOLS: Okay. That sounds great.

Let's hear -- let's have a round then at least of

comments. I know Lucy you wanted to speak earlier. Do

you want to go first here?

CTC COMMISSIONER DUNN: More just notes that I wrote as folks were talking for you to kind of think about if that's okay.

ARB CHAIR NICHOLS: Sure.

missing principle is safety that should be included.

Where is the private sector? They're the innovators here.

It was interesting, because we had a far more in-depth discussion at the last CTC meeting with Washington and Oregon on automated vehicles that I think CARB would find fascinating, if we got into that level of detail, where Mercedes-Benz they won't put a product on the street until safety is their number one consideration.

And I think understanding what the private sector is working on, I think would be critically important for us. I just -- I made a snarky little comment here, so take that just for a Lucy-ism, if CAFE standards are reduced, maybe the gas tax isn't dead yet, right? Think about that one for a minute.

(Laughter.)

CTC COMMISSIONER DUNN: The other thing for me as -- in the world as -- in land planning is the Sustainable Communities Strategies -- and I know I'm speaking heresy, but it's a 10-year old law and the emperor has no clothes. If it was as effective as we think it should have been, we wouldn't be in a 3.5 million home housing deficit, and the transportation issues that we still struggle with and our greenhouse gas issues that we still struggle with would be showing far better improvement.

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I really do think, as leaders, we need to look at how can we make a Sustainable Communities Strategy effective? And so far in 10 years, the performance metrics are not there.

Transit-oriented development is very important.

But without fee reductions and litigation relief, it will just not produce what we're hopping it's going to produce.

And at the end of the day, we also need principles for edge development. So that how can we grow carefully both up and out very carefully.

So just little notes I took on your presentation that we don't have time to go into all of that detail, but it would really be -- that would really be some meaty stuff to kind of think about as public sector leaders in what the private sector is dealing with on how we manage

these issues.

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Thank you very much for your presentation.

ARB BOARD MEMBER SPERLING: Thank you. Lots of good insights there. Do any of you want to respond to any of that?

It's voluntary.

(Laughter.)

MR. SANCHEZ: On the role of the private sector, yeah, couldn't agree with you more. And they're not waiting for us to figure it out. They're going to do it. And that's why it's been so disruptive, whether it's the TNC companies - I live in Oakland - scooter companies, bikeshare companies, and soon autonomous vehicle companies. They're going to move forward with their plans. And we really need to be ready for when that happens.

We put out a report, you know, to look at the equity considerations related to autonomous vehicle deployment. And we really were looking at everything, accessibility, differently abled populations, jobs, economic opportunities associated with both the deployment of the vehicles and also the potential increase in folks being able to, you know, gain access to supermarkets much easier, et cetera.

And it's just a really complicated equation to

have to like come up with recommendations on what to do, but we have to engage with the private sector companies. To the degree that they can be partners in developing the kind of equitable approaches that we want to see deployed in communities. And I think pilots are a really interesting way to think about how can we partner with private sector companies to do first and last mile geofenced type of approaches.

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I think we definitely need to not -- to roll up our sleeves, work with them, and see where we align, and where just the private sector motive and goal doesn't quite align so well with what we need to do for our climate goals, our equity goals, and other goals. And that's where regulation I think is really going to come really handy and important.

MS. CHANG: I'd like to just mention in terms of even just what San Francisco has been able to sort of demonstrate through the Transit First Policy, it took 50 years. It's been 1973 is when your Transit First Policy was first adopted. And even with that, it's just our eastern neighborhoods that really have that sort of pattern, right, the denser, well served by transit.

We still have an outer ring where the VMT and the greenhouse gas footprint is really like many other suburban counties. So we recognize, you know, that this

takes time. It's really just been 10 -- or two cycles of on our regional transportation plans. We've -- as I mentioned earlier, we sort of put that out there, that there would be infrastructure funding. But really, it's only been in the last two OBAG cycles, in our region anyway, that we've really put real money and connected it to who's taking the growth and who's demonstrating the production of the housing.

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So it's really kind of still a bit early. I'd love to be able to -- you know, we've been having this conversation in our region about do we double down, how do we -- how do we go, and how do we recognize that transit might take different forms in different communities, so maybe provide more flexibility around that, and certainly engage the whole community in this conversation.

I'm noting that in our area in particular, we do see the suburbanization of the poverty. We do see auto dependency really locking people into these expensive modes. So how do we address that? I think the private sector and folks that are thinking about mobility, the car companies are also thinking about this. So it's documented through the Three Revolutions and other research, but we really are moving toward mobility as a service.

And then the question then becomes, I believe,

subsidy. And we talked about this at our mobility roundtable in the Bay Area. You know, subsidy is not, you know, a bad word. It just -- it is what it is. In fact, we see subsidy on all sides. The private companies are well funded by venture capital. And certainly that is what is sort of underpinning a lot of the private services that we see in the market, and consumers are responding. But those services are certainly subsidized as well.

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Public transit has been subsidized. We have subsidy policy for a reason in order to express, you know, how we'd like to shape the market through the weighs that we want to support these things that don't otherwise have a way to be viable.

So I just wanted to discuss a little bit about those concepts that we do see subsidy all around. So when companies like Lyft and Uber -- Uber who is in my building, you know, we get together and we talk about what are the solutions? They are for things like pricing.

They are for things like congestion pricing, to the point where 10 years ago, when we were looking at congestion pricing in San Francisco and the Chamber of Commerce was like whoa, whoa, whoa, we're not ready. Now, there's a bit more openness to discussing it. Lyft and Uber are members of the Chamber, along with other companies, of course, who have very important and valid concerns about

how the policy could potentially move ahead.

But the come -- sort of the mindshare, I think, around the table has expanded, and it's because of the awareness of the twin challenge of climate and equity, and the intersection of the two.

Thank you.

MS. WHEELER: And quickly if I could just add, I agree with Commissioner Dunn's statement that we have to engage with the private sector when developing policies on innovative mobility. And then we also as a state have to be a better partner with our stakeholders.

ARB CHAIR NICHOLS: You have to press the button there.

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15 CTC COMMISSIONER GUARDINO: Thank you, Chairman 16 Nichols.

17 (Laughter.)

18 ARB CHAIR NICHOLS: I wanted to give you 19 technical assistance.

(Laughter.)

ARB BOARD MEMBER SPERLING: See, that was the first step towards technical assistance.

(Laughter.)

CTC COMMISSIONER GUARDINO: And I'd like to build on Commissioner Dunn's comments. And first, I want to

thank each of you for being here. You bring expertise that is invaluable to these conversations, and you bring a perspective from -- of being from government agencies, or transit agencies, or the environmental justice community that are key stakeholders in this process.

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My day job at the Silicon Valley Leadership

Group, when we convene, as you do, I'm sure, we try to
think through who are all the stakeholders? And instead
of starting with anything in writing, we start with the
blank piece of paper, so that we write together. So I
want to build on what Commissioner Dunn said.

I hope as we do future joint meetings, and we build stakeholder panels, this is about innovation in AV and the policy ramifications of that. We have no innovators on this panel. We can't plan around that. We don't have that expertise, and we need to show the value of having that perspective.

So I want to encourage us, and I never -- I never try to provide a direction without providing an offer to help. This is my world in my day job. If it is a problem of finding appropriate people who are not only smart, and innovative, and thoughtful, and want to be a part of the conversation, as well as a part of the solution, I will offer that.

The same on the principle of bullet 2 around

infill development, discussing infill development at all without infill developers. We would benefit greatly from the perspective of real market conditions. So again, you all were terrific. I learned a lot, and I took a lot of notes. But let's make sure that the conversation are holistic by having all stakeholders at the table.

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ARB BOARD MEMBER SPERLING: I think we all agree with that. And this is really the starting point for -
CTC COMMISSIONER GUARDINO: Right. But for us, a starting point includes all stakeholders. Not inviting them when we've already put thoughts on paper.

ARB BOARD MEMBER SPERLING: Yes. Okay. I think --

ARB CHAIR NICHOLS: Start with Ms. Burke.

Oh, yea. Putting up your tents will help too as opposed to just waving, right? Send the signal.

CTC COMMISSIONER BURKE: A very short question, I hope. I'm really interested in the allocation of the resources. We've spent a lot of time expanding our resources. What concerns me is how -- as we allocate those, we have -- and you talk about the data, how you will have the data that keeps track with development of new ideas, of the technology, and how we can make sure that we allocate those resources, so they're not obsolete by the time we allocate them.

Very recently, I think we both saw a presentation of a small community in the Netherlands, where the streets have the capacity to take care of the autonomous vehicles, assuming that there will be expansion, and that the autonomous vehicles will be utilizing those streets. Now, we're making tremendous investment in some of those basic streets, highways, transportation centers. I'm really interested in how you put together the data that you share with those who receive the resources, the local governments, so that they can utilize them to be consistent with the expanding technology.

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I expect, and I understand, that next year when we have this meeting, we're going to be talking about different technology. But at least we can work with the data and the technology we have access to today, to make sure that we don't build in obsolete systems, and that we build in systems that are expandable.

And I sit here knowing that in Los Angeles, the buses, the natural gas buses, are blowing up. And so they're going to have to replace those buses with some different technology. I come from a very recent generation of where we believed natural gas was the solution to everything in terms of transportation, just like at this point we talk about electric vehicles as being our solution.

We -- when we come back next year, our two years from now, what I'm trying to really figure out is a way that we can plan to have the data and be able to adjust to these new technologies. Simple question, right?

(Laughter.)

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ARB BOARD MEMBER SPERLING: So is there a...

MS. PODOLSKY: I can respond really quickly
about -- I think that is a big challenge. And we've been
thinking a lot about that at the UC Institute of
Transportation Studies. So the resources that the State
puts into R&D, into research, how do we make sure that the
practitioners and policymakers can use it and benefit from
it? So that's what -- that's your -- the proposition,
what you're putting forward.

So when SB 1 was passed, it did set aside \$5 million to support an annual research program for the UC ITS. Now, this was huge for us. Now, \$5 million is smaller, when you compare it to the research going on at the UC ITS. It's much larger than that. But this 5 million goes directly to the UC ITS that allows us to be a lot more flexible and nimble in partnering, in responding. We couldn't have done that before, because we were responding to call for proposals from traditional research programs that had their own process of identifying priorities' funding. So we'd be starting research about

18 months, two years almost after the challenge was identified.

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So this SB 1 research program has really allowed us to be much more nimble, much more responsive. And so we're really excited about that. And has also offered us the ability to fund in to some of, what we call, these translational activities. So things that aren't part of traditional research, but really help make sure that that research and data gets outside of the University, so it's funding in the staff and the capacity to actually make those connections.

And we really forward to working with Caltrans and others on specifically what you were discussing today, is how do we make sure that this data that is supported, and -- by all the State funded research, actually gets to those who can put it to use. So I just wanted to share that.

ARB BOARD MEMBER SPERLING: So let me just point out one thing about that. And I think then we should go to Kate Gordon here.

Just for everyone's benefit, when you hear UC ITS, what that's referring to is the Institute of Transportation Studies at UCLA, at UC Irvine, UC Davis, and UC Berkeley, and then with partnerships with some other universities, but those are the four main ones.

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Okay. So let me introduce now -- so those of you
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    that still have questions, I think keep your cards up and,
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    you know --
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             ARB CHAIR NICHOLS: Okay. I get to call on them.
    You just get to finish off the panel.
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             ARB BOARD MEMBER SPERLING: Oh, I wanted to.
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   right.
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             (Laughter.)
             ARB BOARD MEMBER SPERLING: I defer to, Madam
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   Chair.
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             ARB CHAIR NICHOLS: No. Go ahead. No, you go --
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   go ahead -- you finish the panel discussion.
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             BOARD MEMBER SPERLING: Oh, I can do it. And I
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    intro --
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             ARB CHAIR NICHOLS: And you get to introduce
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   Kate. This was all spelled out in your script.
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             (Laughter.)
             ARB BOARD MEMBER SPERLING: We're fighting over
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   you, Kate.
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             MS. GORDON:
                          I know. I know.
             ARB BOARD MEMBER SPERLING: So I'm very pleased,
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    delighted to introduce Kate Gordon. I've known Kate for a
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    number of years. She's been an expert in economic
    development and transportation. She's worked in a lot of
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    the different areas, in a lot of different places.
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she was appointed by the Governor just very recently to head up the Office of Planning and Research. And in that role is going to play a key -- will be a pivotal role in a lot of these issues that we're talking about, in terms of the administration.

And so Kate has a really long, really impressive resume. But really, she brings a lot to the table here, both as an expert, as well as very experienced working with a lot of different kinds of organizations, at a lot of different levels.

So, Kate, we are delighted to have you here.

MS. GORDON: Thank you, Dan. Thank you so much. And I will keep this not too long, because I know there are important questions. And this group is a group of people who have an enormous amount of expertise in a lot of different things we've talked about. So your questions are really the meat of the conversation.

I will say my role is -- excuse my voice. I'm recovering from laryngitis so I'm just coming back.

My role at OPR as the Director is really exciting for me. For those who -- and there are many here in Sacramento who ask me what is OPR.

(Laughter.)

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MS. GORDON: It's okay. I like explaining it. We are -- by statute, we are the long range planning

organization within the Governor's office, and we help with long range planning for the Governor and the cabinet. And a lot of that is centered around land use, and the kind of -- which means essentially centered around many of the things we've talked about today. We do some other projects that are related. We actually run the Military Council, so we do a lot of work the Department of Defense on base and operation strategy, and some other issues. But land use is sort of at the crux of what we do.

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I also have the honor of being the Governor's senior advisor on climate change. So in that dual role get to be kind of confusingly both on the cabinet and on the staff of the cabinet. So I haven't totally figured out how that works, but I'm working on it.

As Dan said, in a prior life, I spent a lot of years really working on the intersection of clean energy and climate change and economic development, particularly working with different -- bringing together different stakeholder groups. I've done a lot of bipartisan work, and I've done a lot of work at the intersection of labor, environment, community, and business groups.

So the idea of different cultures in one room is very common to me, and I'm very comfort with it. So I think it's great that this group has gotten together and has that requirement.

I just want to talk for a minute, responsive to the panel, but also really talk about sort of where the Governor's priorities and OPR's priorities on are on some of these issues. And they're very aligned with what we've talked about today. It's great to hear some of the kind of common themes continue to come back from the questions and from the panel.

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So let me just start first with -- with the Governor's priorities. I think you've heard him say, I'm sure, and he's emphasized in every speech, this idea of California for all. So really a state -- thinking about a long range state and development in sustainable growth of the state in a way that really is there for everybody in California.

He's put a particular emphasis on non-coastal California actually, and really highlighted inland California as a key priority, but also, of course, every region of the state, as is his role as Governor. And I think that that comes through -- that California-for-all idea comes through in some of the key priorities.

But underlying it, honestly, really are these two big themes we're talking about in this room. There's -- there's a climate element, because the climate is changing and affecting California every day, as we see with the fires, and floods, and extreme heat, and a number of

impacts.

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And it's also -- we also have a strong leadership position on mitigating climate change globally. And Chair Nichols has been hugely involved in that effort, along with ARB, and every agency in the state. And mitigating climate change also is a place where -- where transportation plays an enormous role.

So that climate transportation intersection really is at the heart of this California-for-all idea. And I think that transportation at the table as sort of probably the key, along with housing, component of how to achieve our climate goals is really critical.

Those priorities that the Governor has laid out -- and I think, Council Member Burke, your point about short-term and long-term priorities and how do we plan for what we don't know is a really good one. One of the areas where we have to plan, to some extent, for what we don't know, and the transportation folks know this well, is investing in things that have multi-decade old lifespans. We're talking about long-term infrastructure and long-term priorities.

And the Governor has really emphasized aligning those long-term investments and priorities towards some key strategies that will open up kind of this California dream to everyone, and address two big crises that we face

our affordability crisis and our climate crisis. Those are obviously housing and transportation -- the intersection of housing and transportation has been something that the Governor has talked about in every speech.

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And he's made commitments to housing production, but made very clear that that housing production needs to have in a way that is sustainable. That we're looking at housing near jobs, and near transit, or transportation options, so that we're not seeing a continuation of the current situation, which is the number of one cost for most -- many Californians is housing, the number two is transportation.

That is in and of itself an equity issue, and an affordability issue, and an access issue. And it's not sustainable. So how do we think about building housing and transportation strategies that are aligned toward a more sustainable growth trajectory?

Some of the areas that he's really emphasized, and we've emphasized on that through the State of the State, through the budget priorities, of course, high-speed rail is a huge one, right at that intersection of how do we think about an area of the state that will be a major growth center as California gets bigger, gets toward what we think is 50 million people by 2050, how do

we do that development in a way that reduces trips between some of those key cities, Merced, Bakersfield, Fresno, connects to regional rails, so that it reduces some of the car trips between other populations centers and job centers, but also building up jobs in those areas. How do we think about high-speed rail stations as economic drivers?

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So what is that huge multi-decadal major infrastructure project mean when we think about what California looks like into the future, how do we design well today, so that we're really building for the California of the future and high-speed rail is a key piece of that.

And I should say that the Governor has asked me and OPR, and then Lenny Mendonca who's the new head of GO-Biz, to really work together on kind of articulating what that vision starts to look like for the Central Valley and for the Inland Empire.

The next big piece that the Governor has talked about a lot, and again at that intersection of housing and transportation, is critically related to climate, and it's this question you've heard about over and over today of vehicle miles traveled or of how much people are driving.

And again, that's a budget issue. It's an accessibility issue. It's an equity issue. It's also a

huge climate issue. We know from CARB's report on the SB 150 report last winter that this is an area where we're unfortunately not showing a lot of leadership on climate change. We're actually growing, and the panel has pointed this out.

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We're growing our transportation emissions in the transportation sector largely through increases in VMT.

We see that again as part and parcel of the housing affordability challenge, and part and parcel of this question of how do you build a sustainability -- sustainable growth and California for all.

Another one that, you know, I've been thinking a lot about -- I started my job three months ago and it's been three months of near constant thinking about the two big things that are affecting us right this second in California, the two big crises of this administration so far, wildfires and the bankruptcy.

while you might ask wild -- how are wildfires related to everything you just talked about? But, you know, it's been really clear to me as we've been -- we run the Catastrophic Wildfire Commission out of OPR, and we've spent a lot of time talking to people in affected communities talking to insurance industry, talking to the private sector. And it's become increasingly clear to me that the fires -- the impact of the fires is also part of

our affordability crisis and our VMT crisis.

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We are looking at communities where seniors in particular, but also low-income folks on fixed incomes have been forced out further, and further, and further, and further from job centers to a -- a two bedroom house in Paradise costs \$800 a month to rent.

So you have folks who are -- that is not a price you can get in most of California. Folks being pushed way out, and then you get this geographic isolation and social isolation. And 60 to 70 percent of the folks who have died in these fires have been people over 65.

This is a very clear issue for the state and for our sustainable growth. And we need to be thinking about the fires, not just as isolated incidents that are sort of out there, unrelated to our growth centers, you know, out there. We've got to deal with them. We have to do fire management. That's all very true.

But we also need to think about long-term growth patterns, again connecting housing, connecting transportation, really bringing together the issues this -- these two groups work on to build more sustainably.

So those are three big picture -- I mean, you know, it's a lot to work on already, right? High-speed rail, VMT, and fires, all of which are very related. But

underlying both of those are two sort of structural things that I think that these two groups have a lot of experience with, and the Governor has prioritized. And I've done a lot of work personally on with -- mostly with the private sector actually.

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One of those is climate resilience. So as I said earlier, climate change is both impacting all these structures that we're building for the long term. And it's all -- and it's going to do so even more. We can do -- we could take the scoping plan, and double it, and stop all emissions tomorrow, and we would continue to see the drought and precipitation cycle, and we would continue to see ocean acidification, and we would continue to see sea level rise for some period of time. So these are not things we can just stop.

We need to plan for them. And it's incredibly important as we're thinking about our transportation future in particular, because we have these big place-based systems, thinking about what the impacts will be on those systems. I know Caltrans is already experiencing record snow removal costs this year, already experiencing flood costs, already seeing impacts on certain road materials of extreme heat in parts of the state.

These things will continue and need to be built

in to how we think at the State level in every agency, how we think about we're -- how we're doing our investment, because we owe it to the taxpayers to be fiscally responsible on these things. We owe it to build -- to the taxpayers to build resilient infrastructure, and we owe it to our communities.

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And I think that the transportation agencies, in particular, have a real leadership role to play here, because of the sheer amount of investment frankly, but also because of the -- that key connection to all these other climate issues.

And finally, just one point on something we haven't talked about much today, but it's another kind of equity issue just around who is the workforce who's going to make all this happen. The Governor has made it a priority in the budget to dramatically increase funding for workforce training, for those who are building this sustainable economy of the future.

And I think that's -- we sometimes forget that actually we don't get a big emission reduction and we don't get a lot of resilience if things aren't built well, and if they are not built by folks with skills, and if they're built -- not built to standards, and if they're not invested in, in terms of their operation and maintenance.

We all know that as State agencies. We have rules on these things. We hire people and train them, and are focused on that. That needs to be part of our investments in the private sector as well.

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So that's kind of to your point, Counsel Member Burke, about kind of the long term. Like, how are we thinking about these things that will be in place for a long time.

But then there's the whole set of things the panel has addressed, and Chris Ganson from my team, I'm proud to say, has addressed, which are more short term. How do we think about the things where we really don't know how they're going to end up. What is the fuel of the future? How are we going to think about these AVs and shared mobility options? What's going to happen with all these scooters and bikes?

We just don't know. A lot of that experimentation is happening at the local level, but I just wanted to underscore what the panel said, about the value of kind of pilot projects and local scale projects, and the State partnering to learn from the local level about what works and what doesn't work, because nobody thinks that we should be spending five years coming up with a strategy to invest for 35 years in something we don't fully understand.

But what we can do is support some of these really interesting -- I mean, here in West Sacramento has a really interesting mobility project, where they've kind of replaced a lot of traditional transit that was running on 20 or 30 minute cycles with vanpools that are on demand. It's had a tremendous impact on the city in terms of accessibility. And it's interesting. It's mostly used by seniors and teenagers, which I think is a really cool like -- what else brings those two groups together? I mean, I think that's a very interesting social outcome.

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But thinking about experimentation, there is a role the State can play in that, in leveraging some of this intelligence and nimbleness, at the local level, and particularly to Carl's point, in the private sector, where they're just dealing with this stuff. They're -- they've got money on the table. They're trying to figure it out every day.

So we're really excited. From the Governor's office perspective, from OPR's perspective, we're really excited about these changes in the transportation world. We're really excited about what's possible in terms of addressing our climate impacts and mitigating climate change.

And I want -- just the last thing to say is that we -- we exist as sort of a place where interagency work

happens. We're fortunate to run the Strategic Growth Council, where the transformative climate community, kind of is a pilot project, happens. We learn a lot from that, but that Growth Council, which I chair, has the Secretaries of many of the major agencies, including Transportation, but also -- it also includes agriculture, housing, economic development, a number of others. And we are a great resource, as CalEPA, we are a great place to think about how to do interagency conversation on some of these hard issues, and would just love to be a resource to this group, and support you however we can. We're thrilled you're here.

And just personally, I've served on commissions.

I know how much work it is. I know how big of a time

drain it is, and I know what a commitment it takes to the

State, so just thank you all personally for doing that.

(Applause.)

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ARB CHAIR NICHOLS: Thank you. That was a terrific charge to us and gives us, I think, a really good umbrella to cover over some of these conversations that we're -- that we are having.

And find the places of commonality where we can all come together and try to address what the real priorities are. So thank you so much for that.

We are, of course, running behind sort of

predictably, and we have a hard stop. So I think what I would like is to ask those who have their cards up and who want to speak at this point to -- we'll just did a round really quickly, and then we will -- and then we will call upon the people who have signed up to speak.

So I will start at this end here.

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ARB BOARD MEMBER MITCHELL: Thank you, Madam Chair. And thank you to the panel that came today.

A lot of thoughts are floating through my head as I listened to this conversation. And I come from Southern California. I sit on the Regional Council of the Southern California Association of Governments. We are now embarking on the next Regional Transportation Plan, which will go from 2020 to 2045. And one of the things that is striking is the demographics that have been presented to us.

Those demographics show that by 2045, 65 percent of the population in our region will be over 65. We need to think about who we are planning for. And as we get an older population, we need to think about their needs, and what may come out of that.

The other thing is that when we -- when we do this kind of planning, there isn't one size that fits all. We're looking at communities like Moreno Valley that are way out. And some of those people actually drive all the

way into the city and commute for you, know, many, many hours every day.

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Is -- that's a -- that's a style of living that maybe we want to work -- think about and change. In some areas, there is no central commercial district. I know in SCAG region, we're looking at there are multiple commercial districts, and we should think about development around those multiple commercial areas.

We also should think about planning along major arterials, that would be like transportation corridors, as a place to think about planning. Transit-oriented development, yes, but perhaps transportation-corridor development as well. We won't have transit everywhere.

And neighborhood-oriented development, we've talked about that too in my region. It's something to be thinking about. This intersection between transportation and land use, that really is a strategy on climate change as well. And there was a very interesting op-ed recently. I think it was Senator Wiener who did an article like that.

And I think that's true. What we're -- this intersection between land use, transportation, and air quality is just so intertwined. The collaboration I think is really important. I think big data is really important. These demographics should be playing into

that.

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And the framework. I think Ms. Podolsky mentioned developing a framework for the policies that we are embarking on. One of the persons that came to talk to us last week was from ITS, Brian --

ARB BOARD MEMBER SPERLING: Taylor.

ARB BOARD MEMBER MITCHELL: Say it again?

ARB BOARD MEMBER SPERLING: Taylor.

ARB BOARD MEMBER MITCHELL: Yes, from UCLA.

And I said to him after his talk, we need some -we need more of academia helping us in these discussions.
And they're actually studying these things. And I think
this is an important part of the collaboration that we
have academia. We have environmental justice communities.
We have developers. Who's going to build that housing?

Cities, for the most part, don't build housing.

We don't have the money. We plan for it. But how does it actually get built? So we need to have those -- those conversations. This collaboration is really important.

This discussion has so many pieces and parts to it.

I'll close here, but you can see there's a lot of thoughts about how we actually get this done, and how we can do it smart, and right for the future.

Thank you.

ARB CHAIR NICHOLS: Okay. That's a lot. I think

we'll just take the comment, unless anybody has something they really want to say right away.

Okay. Ms. Takvorian.

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ARB BOARD MEMBER TAKVORIAN: Yeah. Thank you, Dr. Sperling or thank you so much for organizing the panel, and to all of you, and to Kate for all of your comments.

I just have a lot of questions about -- that I know we're not going to get answers to. But I think that hopefully they can influence our conversation about I guess it's short and long term. And I feel, Kate, like that's what you were talking about. I felt like some of our panelists were talking about that as well. We have a crises in our communities, in disadvantaged communities particularly, around housing affordability, about maintaining communities, and gentrification issues, the importance of maintaining cultural influences in our communities, maintaining the communities that we've historically had.

And those communities are starting to disappear as a result of housing affordability. And I'm just not hearing that as part of the conversation. I know it is part of the conversation, but I just want to insert that.

And then accessibility seems critically important, as all of you have really mentioned. They're

the same kinds of issues that communities, environmental justice, disadvantaged communities have struggled with forever. How do we get to jobs, how do we get to school, how do we get to that better life?

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But hopefully, it's not on a freeway in a fossil fuel car that's getting us into a suburb, right? So we're trying to switch that, flip that script. And it seems like we really need to -- we need to look at what the best practices are. But I'm really nervous, I want to say, about experimentation, and about extensive discussion of pilot projects in a certain way. I think they have a role. But, I mean, you've all laid out, and I think we all know we're in a crisis now, and we need to put some solution-oriented practices, and frankly requirements on the table that cities and counties need to comply with at a certain -- not to sound too heavy handed, but we know a lot.

So what are those things we know a lot about that we should be requiring through the SCS, to the -- to all of the cities and counties, so that we don't make some of those obvious mistakes? That doesn't mean that we're not allowing cities, and towns, and counties to be who they are. But I'm just nervous about saying, you know, let's just try this stuff out for another 25 years and see what happens, because it seems like the indicators are kind of

pointing in a particular direction. So more questions than answers. Sorry.

ARB CHAIR NICHOLS: Thank you.

Dr. Balmes.

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BOARD MEMBER BALMES: I'll be quick in the interests of time. But I actually am glad that I followed Ms. Gordon, because she brought up a couple of things that I really think are important and need to be highlighted.

And, you know, the wildfire. The effects of wildfire on our land use in California can't be underestimated. It's not just that people are being pushed out into the woods for affordability, we actually can't afford to take care of those people in terms of the risk of wildfire. And so it's a key part of land-use planning in California. So I'm really glad you brought that up.

The other issue that I've -- I only heard Mr.

Sanchez touch on - I'm sure he feels strongly about this is jobs. And not just new jobs in the green economy -the sustainable economy, and the transportation
infrastructure that Ms. Gordon mentioned, but the jobs of
relatively low wage workers that are driving Lyft and Uber
vehicles. I mean, what are we going to do about that. We
need to start planning for that -- a just transition for
those workers as we move to autonomous vehicles.

And the sooner we start, the better. Because in my experience with job retraining nationally, as well as in California is it doesn't work most of the time. So we have to figure out a better way for the future.

Thank you.

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ARB CHAIR NICHOLS: Okay. Mr. Vice Chairman.

CTC VICE CHAIR VAN KONYNENBURG: Thank you for your presentation. Laura, you mentioned data and how it will be stored. My understanding that an autonomous electric vehicle generates anywhere from 2 to 5 terabytes of data per day when it's operating, is that correct?

Okay. Well, it's a lot.

(Laughter.)

becomes as we go forward how -- and this is where having someone from the industry would be really helpful, what guidelines will there -- to make sure that's data shared, how will it be disseminated, and who has -- I would assume it would be -- you know, we would have to have a situation whereby there would be shares of a server farm, or we would allow -- have some form of artificial intelligence to -- by a local government to be able to look at that data, and glean information where the infrastructure -- that allows us an opportunity to have eyes on the infrastructure much more than a current local government

has eyes on the infrastructure.

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So the question is how we share that data, how is it stored, and how do you build the algorithm to get through an enormous amount of data to get what you really need to improve the infrastructure. So that I would like to see on your point four on connectivity that explored.

Thank you.

ARB CHAIR NICHOLS: Okay. Turning this direction.

Dr. Sherriffs.

ARB BOARD MEMBER SHERRIFFS: Thank you.

You know, clearly, the discussion -transportation is no longer just transportation. It's not
just moving people and goods. And we are really having to
focus on the secondary effects, the unintended
consequences that go along with this. And so the hammer
and nail that I always come to these meetings with is
health.

And, you know, using health is an important strategy, an important measure for really evaluating any project. What are -- and not necessarily that the balance is going to determine whether we do something or not, but we do need to understand what are the health benefits, and what are the health consequences, the negative health consequences to any project we do.

And I think that kind of information, it's not necessarily easy to come by, but to focus more on that. Because I think that clearly is something the public can identify with and understand. You know, we talked about more bottom-up rather than top-down. Communities determining what their priorities and worries are that it plays an important role in that as well.

Thank you.

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ARB CHAIR NICHOLS: Okay. Carl, did you want to just interject.

CTC COMMISSIONER GUARDINO: I'll go after Christine.

ARB CHAIR NICHOLS: All right. Fair enough.

CTC COMMISSIONER KEHOE: Such a gentleman. Thank you, Carl.

I just want to bring up a suggestion, and maybe, Mary, you can help me with the correct title. A few years ago, maybe in the 2013-14 timeframe, the previous administration had a roadmap, a survey, some sort of a plan for electrification.

ARB CHAIR NICHOLS: Um-hmm.

CTC COMMISSIONER KEHOE: It was all the agencies, and timeline specific.

ARB CHAIR NICHOLS: They did.

CTC COMMISSIONER KEHOE: So Caltrans and the

Energy Commission, and Air Resources Board, and others. I think we could use some sort of a snapshot like that. And here I am sitting right next to Kate Gordon. What could be more appropriate. Perhaps --

(Laughter.)

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Office, through OPR, could really kind of launch this. Is it going to solve all our problems, ID every issue we have to deal with? No, it's not. It's not even going to tell us everything that's going on in State government. But everyone of these meetings we hear about connectivity. We hear about sustainability. We hear about congestion. We hear about AVs, and many, many, many more items.

Particularly interested in wildfires too. San Diego has had their fair share -- or unfair share is maybe the better language.

So I would really like to see that. That's not to -- it't not going to capture everything. We do need to beef up our private sector participation. Real innovation and investment is happening on that side, not exclusively, but significantly.

I just felt some things had jumped out at me and then I'll close. Local government also is innovative.

And I am -- I'm good with innovation and some pilots. You know, the elected bodies and others have to keep an eye on

them. Maybe that's the weak link, but it needs to be done.

But the things we talked about today that are -seem to be added into the conversation. Shared data, I
mean, there's pluses and minuses all over that topic. It
is also a very rich and -- it's a money generator, and we
shouldn't lose site of that.

Wildfires, DM fees and the AV, all these things that we need to get them on one -- maybe perhaps in one document that will help us sort out who's doing what.

Thank you.

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ARB CHAIR NICHOLS: So the document that you're referring to was prepared in the last administration was updated several times.

CTC COMMISSIONER KEHOE: That's right, it was.

ARB CHAIR NICHOLS: And I believe the original impresario of that whole effort was a person who is now part of this administration as Secretary of the Natural Resources Agency, Wade --

CTC COMMISSIONER KEHOE: Crowfoot.

ARB CHAIR NICHOLS: -- Crowfoot.

CTC COMMISSIONER KEHOE: Yeah.

ARB CHAIR NICHOLS: So we could probably get him to tell us how he did it. But it was a -- it was a major undertaking and it did include staff from many agencies,

and certainly a bunch of people from my agency were very actively involved.

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CTC COMMISSIONER KEHOE: I knew you would come up with the right name. And I thought -- I thought of Wade early. We could definitely ask him to volunteer maybe.

ARB CHAIR NICHOLS: Great. Thank you. Okay. Carl, last comment.

CTC COMMISSIONER KEHOE: Thank you, Mary.

CTC COMMISSIONER GUARDINO: Very quickly. Thank you, Chair Nichols. I was really struck in a positive way by what Dr. Sherriffs mentioned about health, and what Commissioner Dunn mentioned about safety.

We lose about 40,000 American lives a year in car crashes, primarily due to human error. And one of the fascinating items that is almost a moral imperative about AVs, when the technology has gotten to a point where we have bent that curve, and we're going to be saving a lot more lives than we're losing, there's going to be a moral imperative to find ways to employ that technology. And I just think as we have these conversations, we can't lose site of that moral imperative that we can be saving lives.

ARB CHAIR NICHOLS: Yeah. Okay. I am going to now turn to the public comment period, but I'm going to take the prerogative of the Chair to say two things. One of them, which is slightly facetious, is that when I hear

the word pilot projects, I think of China, because I've been doing so much work with the Chinese on Cap-and-Trade programs.

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And I've learned that in China, which has, you know, I forget how many cities that have 10 million people in them that we've never even heard of. The central government has such a hard time imposing policy -- making and imposing policy on their vast empire and population, that they do everything by pilot projects. But when they do a pilot project, what that means is it's coming and everybody is going to be doing it soon. But they give the pilot project city a little chance to, you know, be the first and work out some of the kinks. But it really -- it really is a national policy when they call it a pilot.

The other thing I want to say is that, again this is on the climate front, but it's so much on my mind these days, is that when the countries of the United Nations left Paris, having made the commitment that they did to try to hold emissions down, everybody understood that the job of actually making it happen was going to be the private sector's job.

That government couldn't possibly do what needed to be done to make the kind of dramatic shifts in fuels, transportation, electricity, everything that had to happen. And we have yet to actually come to the point

where we have unleashed all of the power that's there.

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And one of the things that I keep hearing coming back is, yes, the capital is out there, and some of it is actually, you know, being invested. But big multi-national companies are leaking to governments to give them the safety net to make those investments. That is, they want to be part of the solution, and they want to innovate, and they are eager to be part of it, but they don't feel like they can do it, especially in risky and untried areas without having some assurance that there is government policy, which is going to be stable, and which is going to provide some kind of a pathway towards realizing the benefits of those investments.

So I would just urge us to sort of not take an either/or, you know, government mandate versus private innovation approach to these issues, especially given the responsibilities that we who are appointees serving on the boards that we do have, but to recognize that we have to work in this space, where we're trying to bring everybody to the table to actually make something happen.

Now, having given my sermon for the day, I would like to actually call on the people who signed up to speak. But given the timing, we're going to give you a minute. And just lineup, and come forward, and give us your thoughts starting with Dr. Alberto Ayala.

DR. AYALA: Thank you, Chair Nichols. It's great to be here. Thank you for the opportunity. I'll make it quick. I want to very much emphasize and agree with Dr. Sperling's first bullet. We, in the Sacramento region, want to partner with the State to try out pilots and these new partnerships.

But once central principle that I want to emphasize is we need to be equal partners, because we need help. Obviously, we talked about funding, that is a critical issue. But beyond the funding, I think there's a lot happening at the local level that is going to give you some really important lessons.

Our community cars-share program is one of those lessons. And in addition to the technology, there's also an opportunity to come up with some ideas for policy innovation. What are the rules and regulations that the State is going to be putting in place and how should they be aligned with local actions to make sure that we support both the supply and demand of AVs and many other technologies that are coming?

Thank you.

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ARB CHAIR NICHOLS: Thank you.

Okay. I guess everybody can see where they are on the list, so you'll just come on forward, please.

Thank you.

MS. PARK: Thank you. Good afternoon, Madam Chairs Nichols and Inman, and the Board members and Commissioners. My name is Rosa De León Park. I'm the Executive Director with the Stanislaus Council of Governments.

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But I am here today as the Chair of the San
Joaquin Valley Regional Planning Agencies' directors. On
be of the eight Central Valley Metropolitan Planning
Organizations, I would like to share our collective
thoughts on ARB's Sustainable Communities Strategies
quidelines, which are in the process of being updated.

The San Joaquin Valley MPOs have engaged with your ARB staff for over a year on the update of the Sustainable Communities Strategies evaluation guidelines. MPO staff have participated in the workshops, have had many phone calls with ARB staff, upper management have submitted multiple comment letters, all which have produced little or no changes to the draft SCS evaluation guidelines.

Efforts on the regions that we have been working with our local agencies towards reaching our state's 2030 and 2050 climate changes goals, we are working with encouraging types of transportation -- sorry. My members of the --

ARB CHAIR NICHOLS: Finish up your sentence.

MS. PARK: -- other valley COGs are here to update you more.

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ARB CHAIR NICHOLS: Thank you. I saw you were a group. So hopefully all the points will get covered.

MR. CHESLEY: Thank you, Chairs, members of both the Boar and Commission. I'm Andrew Chesley, the Executive Director of the San Joaquin Council of Governments in Stockton.

I was a member of the Regional Targets Advisory Committee that was put together under the leadership of Chair Nichols. During that process, we had very collaborative effort to develop regional -- that collaborative effort appears to have been lost over the course of the last 10 years. The guidelines that are being promulgated today are universally opposed by the MPOs across the state. Great dissatisfaction with them.

I would also point out that the challenge that you're facing with the waiver issue is one that while ARB has taken leadership on that one, last in 2018, it was not a leadership that was shared with the transportation community. As a result, we have had to discover the implications of this on our own. And really, it was only within the last three weeks effectively, the regional transportation planning issues and transportation community have come to understand the challenge that air

quality conformity findings are going to have when it comes to the Commission's putting -- trade corridor funding, as well as other funding sources as a result of SB 1.

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MS. CAI: Madam Chair, ARB Board members and CTC Commissions. My name is Kristine Cai, Planning Director of Fresno Council of Governments. I am here to share with you our concerns about the SCS evaluation guideline update, which is supposed to be finalized by ARB staff end of this month.

The new guideline is going to require significantly more technical modeling than the existing version, which we believe is against the direction given by the ARB Board back in March of 2014 to shift -- 2018, I'm sorry to shift away from modeling. Since the inception of the SB 375, the -- San Joaquin Valley MPOs have spent more man \$5 million in upgrading our models. And with the new guidelines we'll be spending millions more dollars on those models.

So we believe that the millions of dollars will be better spent in other projects like alternative transits, bike and ped, and other sustainable projects.

With high unemployment rates, and air quality issues, and high concentration of disadvantaged communities, the valley has many equally important goals,

such as economic development, job creation, et cetera.

So we would like to work with the State on these issues.

Thank you.

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MR. BALL: Thank you, Chair, Committee members.
Rob Ball, Deputy Director at Kern Council of Governments.

And I concur with our previous presenters from the San Joaquin Valley. Just some additional comments related to the guidelines. We need to avoid the potential of conflicting guidance by incorporating this SCS guidance into the RTP guidelines that are adopted by the CTC.

Two, we need to tailor the thoroughness of the review that we're going through on these Sustainable Communities Strategies, depending on how close a region is to achieving their target. And that if they're exceeding it by a large amount, they don't need to spend the additional five months of analysis on little items that might just make a minor change.

And then finally, three, the valley is committed to meeting our ambitious targets, even with or without the CAFE standards. But about the same time CARB began reviewing our SCS, 200 Bird scooters were dropped in downtown Bakersfield. And we've now seen over 20,000 transcription -- zero-emission trips happen within Bakersfield since our SCS started review.

So that concludes my comments. Thanks.

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ARB CHAIR NICHOLS: You guys are doing great staying within the time limits. Thank you.

MR. STONE: Good afternoon. Dylon Stone, Madera County Transportation Commission. I, too, have some concerns about the proposed guidelines.

I'm a modeler. I work on the RTP and conformity analysis, the GHG analysis for our county, among many other things. We have a very small staff. We're the smallest MPO in the state. I'm concerned with the amount of additional work this looks like it will be and to what end, when I can see our finite resources going towards meaningful implementation of these innovative strategies we're talking about. With our finite resources, I'm really concerned we're going to be in an either/or situation when both of these things have a great affect on each other.

And I believe our comments should warrant the consideration of CARB, and I'd like to see action that indicates that they do. Thank you for receiving my comments.

MR. CORLESS: That was impressive. Can I take Dylon's 20 seconds on that one?

(Laughter.)

MR. CORLESS: I'd just like add on to my...

(Laughter.)

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MR. CORLESS: Three quick points. James Corless, Executive Director of the Sacramento Area Council of Governments. You have heard, and I know you know, about the SAFE Vehicle Rule that's coming out of Congress. And I just want to impress upon all of us, if we go into any kind of conformity lapse, it is economic pain across the State. And we are here, as all the MPOs, to help you get that message to Congress. And our whole delegation, entire delegation, we need to make sure this doesn't happen.

Second, pilot projects, demonstration projects.

I want to give lots of credit to a lot of my partners here locally in the Sacramento region, whether it's the West Sacramento ridesharing, whether it's microtransit pioneered by Regional Transit right here in some of the poorest communities in our region. We have a real opportunity and a challenge to try to figure out how low-income communities can take advantage of some of these new demonstration projects and microtransit.

And finally, both from the State and the federal level, if we want innovation, you have to make it easy.

We have been denied spending federal air quality funds on some of our most innovative projects.

Thank you.

MS. KAWADA: Hi. I'm Kim Kawada, Chief Deputy
Executive Director for SANDAG. I just want to touch I
know on the SAFE Vehicle Rule. You've heard a lot about
it. I just wanted to give you some sort of local color.
It does have impacts because of the latest planning
assumptions and what would need to be done in terms of the
model that affects both our long-range transportation
process and how we can meet, you know, our -- the
greenhouse gas reduction targets.

And it has very real immediate impacts potentially on projects in our TIP: our largest public transit project, our \$2 billion light rail extension, which is midway through construction; a South Bay Rapid Project, which was funded by TRCP projects; our North Coast Corridor Project, which has been held as a model for collaboration in terms of rail, and highway, and environmental.

Those are some of the projects that are at risk if we don't address this rulemaking and how it affects sort of planning, and transportation program, in California. So we look forward to working with everyone in terms of this and urge you to basically work with local agencies and regional agencies to figure this out.

Thank you.

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MS. TAYLOR: Thank you. Tanisha Taylor, CALCOG.

You've heard from many of our members about the SAFE Vehicle Rule. And I'm here to echo all of the things that they've said about the amount of concern and angst at the SAFE Vehicle Rule and the potential finalization of that rule has.

I stand here as a partner in that discussion and offer our services to help identify those -- the implications to the transportation system. We are working with our. MPO regions, as well as our rural regions. Chair Nichols, you identified that the MPOs would be impacted. But there are also some rural regions in the state that would be impacted by the SAFE Vehicle Rule.

As you've heard, the SAFE Vehicle Rule and finalization of that rule would have significant impacts on equity, GHG emissions, health, the transportation system, as well as the economy. And so again, we stand here with you as a partner in your discussions for the SAFE Vehicle Rule, and we look forward to working with you and your staff as you work towards workshop on identifying implications throughout the state.

Thank you.

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MS. PFEFFER: Good afternoon. Thank you, Chairs, and commissioners, and board members. I'm Nancy Pfeffer with the Gateway Cities Council of Governments. We're in Southeast Los Angeles County. When you met together in

December in Los Angeles, I spoke to you about an issue regarding the 710 freeway and the urgent need for interagency collaboration in order to ensure that we have clean trucks running on those -- on that freeway.

To clarify and update you on that, the EPA -U.S. EPA is looking for a commitment from the agencies,
especially from Metro, to include that Clean Truck Program
as a programmatic part of the I-710 EIS/EIR. And we can't
finalize the EIR without that commitment.

Metro has now come up with a draft memorandum of understanding that they would like to see implemented. The parties would include Metro, South Coast AQMD, Caltrans, SCAG, the Port of L.A., the Port of Long Beach, the Air Resources Board, and U.S. EPA Region 9. This is a really important opportunity for the State to show leadership and this need for collaboration. So that I hope that all of you will participate. I've spoken with some of you about it. And I hope that you'll support this collaboration and MOU.

Thank you.

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MR. BOYCE: Bill Boyce with SMUD. I wanted to make two points today. The first point is SMUD is helping in the Sacramento community to stand up a new e-mobility center, where we're hoping to gather upwards of 60 to 70 million dollars to help attract private industry into

Sacramento to work on a lot of these technologies, perform pilots, and help develop a lot of what we see today as coming in the future. As electricity gets used more and more as a fuel, we see this as a natural role for SMUD. So, we're doing that in concert with other partners, agencies, and the academic institutions in the country -- region.

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The last thing I want to say kind of builds off something that Kate Gordon said and Dr. Balmes said.

We're also in the process of developing a whole series of low carbon fuel standard, low-income, disadvantaged community projects. And instead of just getting cars and charging infrastructure into these communities, we're also incorporating awareness, workforce development, and economic development in everyone of those. And I suggest that evaluation criteria like those in future projects should be included.

MR. MAGAVERN: Good afternoon, Bill Magavern with Coalition for Clean Air. I wanted to say first that I think potentially the greatest value of bringing these two agencies together would be the integration of State policy when it comes to, on the one hand transportation funding, and on the other emissions, from both an air quality and a climate perspective. I think that's why the Legislature wanted you to come together. So as you plan your future

meetings, I hope that we'll closer to that integration that's been sorely lacking in State policy.

Secondly, earlier, the issue of the Low NOx Truck Standard came up, and I wanted to say that's something that we strongly support. We've met with CARB staff already and look forward to continuing to work on lowering the emissions coming from trucks and other heavy-duty vehicles.

On autonomous vehicles, we support the State principles and really everything that Chris Ganson said in his presentation. On the related topic of transportation network carriers, we know that San Francisco and Los Angeles, maybe others, are looking at taxing the TNCs. And we've ordered them to tier those taxes, so that a shared zero-emission ride would be the most lightly taxed.

So I would urge both agencies to weigh-in with local governments that are considering those taxes.

Thank you.

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MS. WISE: Hi. Ella Wise from Climate Plan, a network of more than 50 organizations statewide working for equitable sustainable healthy communities. We submitted a letter, and I'll just reflect some of the comments from that letter.

We really appreciate the discussion and support using new mobility to achieve our goals. But the -- but

new mobility will only really work within a context of sustainable land use, multi-modal system, equitable economy. And that's the power that we have today in these two entities, these two agencies is to effect that greater context. So as others have said, let's maintain focus on aligning our state transportation dollars with our state claim and equity goals. And there's great opportunity to do so.

Director Bransen gave a great update about the CTC's work. I don't know about you, but I'm hungry for immediate action today after this long good discussion. There is opportunity to do that in the SB 1 funding guidelines. And I encourage you all to consider that as an opportunity for collaborative action.

Thanks very much.

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MR. HAMILTON: Good afternoon. Kevin Hamilton with Central California Asthma Collaborative here to speak for the San Joaquin Valley environmental justice community on these particular issues, and especially the rural communities that are often left behind in these conversations.

And it was great to hear members of the Commission and Air Resources Board raise those communities and their concerns. I heard the Green Raiteros program mentioned. It's a great pilot, because it's built inside

the county COGs and the FTCA in Fresno County. So it does have that kind of durability and evaluative ability to be able to be -- cookie cuttered around the region.

Also, Imperial County has come up with some really beautiful strategies to get people to work and to school and focus on those areas with low-emission, zero-emission transport of varying types. So we need to learn from those counties in the efforts they've made in getting the rural communities connected to work, and to education, and to medical visits. And these are the most critical things for them.

We tend to want to take them shopping I've noticed with our transportation systems, and that needs to stop.

Last but not least, we need three commissions in this meeting. What you're lacking here is the CEC. You altogether wield an incredible amount of money and an incredible amount of power. And without it working together collaboratively, we will never achieve any of these goals.

Thank you.

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MS. McPEAK: Good afternoon. Sunne McPeak with the California Emerging Technology Fund, also representing 15 regional consortia for broadband, and about 100 community-based organizations that address the needs of

the digitally disadvantaged, which are the same folks that are your disadvantaged communities you focus on.

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We're here to say if Dr. Sperling had a fifth bullet on the list, it would be digital inclusion. That's the interface of transportation and air quality. When I was Secretary of BT&H, I used to say the best trip is a virtual trip.

If we want to relieve congestion and we want to relieve impacts on the environment, let's avoid a trip.

And so we appreciate the California Transportation

Commission actually recognizing strategic broadband corridors in corridor planning in the guidelines you adopted.

In November, the Air Resources Board listened to us, scratched your heads, and said staff go think about it. The CARB staff met with us yesterday. I think we're making progress. We're here to work with both commissions, and particularly the Strategic Growth Council on how our CBOs could work with the community organizations being funded there on digital inclusion.

May I say for the record, since I'm an old has-been in an administration, everything I said is true, except of all your other strategies, the one that is absolutely the most important is getting housing and land use right. We're never going to get to the greenhouse gas

emission reductions without adequate housing supply, and that means adequate land supply.

So please take to heart all of that and get on with the action. I, too, am getting too old for this stuff

(Laughter.)

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ARB CHAIR NICHOLS: Thank you.

CTC COMMISSIONER GUARDINO: Should we all Commissioner Dunn to cross-examine her old boss?

(Laughter.)

ARB CHAIR NICHOLS: We were just -- we were commenting on -- yeah, what about BT&H.

Okay. You guys.

Take it outside.

(Laughter.)

MR. FLORES: Okay. I'm Chris Flores. I'll be -I'm with Sacramento Regional Transit. I'll be brief as
your last speaker. I want to thank the Commission and the
Board for hosting important panel discussion. We're
seeing great changes in mobility. And customers are
demanding more. And Sac RT is listening to them. Last
year, we launched three different various microtransit
zones in disadvantaged communities, and with the goal of
launching those with zero-emission vehicles.

We -- prior to that, we implemented a mobile app

to alert them the real-time arrival, so they can communicate to us on security concerns, and safety concerns, and allow them to buy fair payment not at the station. So we -- and then we will soon be transitioning to zero-emission vehicles prior to the State mandate.

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Transit agencies are thinking innovatively and implementing. And we want to -- but we want to have as many -- we want to have a level playing field as we do so. So I hope as the Commission considers different policy considerations, they'll consider what our transportation goals are, and including the aging population, disadvantaged community, and disabled community as well.

ARB CHAIR NICHOLS: Okay. Thank you all very much. That was a terrific set of comments. And you all kept pretty close to the time deadline, as a result of which, we have a little bit more time if members of these two august bodes want to add any additional comments or questions.

Thank you.

Otherwise, we could actually close the meeting.

But I do want to say -- and I'm open to anybody

who wants to raise their hand and add some additional

comments. But I want to say this has been, I think, our

best meeting yet. I hope they continue on that

trajectory. Fortunately for you all, at the next meeting,

you'll have Commissioner Inman in the Chair. So I'm sure she will crack the whip and get us working together before that meeting happens.

Do you have any comments you'd like to make at this point, Fran?

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CTC CHAIR INMAN: I do have a reputation for being a little long. So I'll have to work on that. Mary, you did a much better job of keeping that timer going. I hate that sound personally, but that's just Fran and my lifestyle.

I've been taking a whole bunch of notes here.

And just a couple of things I have -- too, have also really, really enjoyed this.

A couple things to highlight. One, the sharing of what research we have now is something that we ought to be able to do immediately. And so I think on our short-term, and I actually offered that up the UC SB 1 ITS, whatever body that was, I was there. But I do think we need to share. And I have struggled with TRB forever, because we all go there, we get all excited, and then we come home and everybody goes back and we don't build on that, so let's share.

I also -- the best practices, the microtransit, a lot of discussion about what's going on. Let's figure out a beta -- a way to share that. I was just at a briefing

with OC, Orange County Transportation Authority on the OC Flex, where they've had tremendous success. And I know that it's not one size fits all. But let's at least find a good way, so that people can have a good venue for sharing what they've found and the next region can say, oh, I could do something sort of like that.

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And then I think also just want to reinforce engaging our private sector partners early, because a lot of them are really pushing the bar for all of us. We would not have transportation network companies, in my opinion, if it was left to us. They came to us.

And they came to us because we had a sector that hadn't reinvented itself in a very long time. And the customer service level was kind of missing in my opinion.

So I think it's -- you know, let's get those folks, let's listen, and learn.

And then I also -- I think it was, but it might have been Laura, one of you, really talked about marketing. And we have chided ourself on the transportation sector. We tend to be having -- have a lot of engineering focus. And we're lousy marketers. And I think we all need to improve our communication talking to our residents, our clients, whatever label we're going to put on our communities. But I think we really do have to raise the awareness, do a better job of communicating

effectively to get our multiple solutions.

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And then just in closing, I think it was this week, but it might have been last, I listening to NPR about the robots on the college campus. So the whole time today when we're having this discussion - and I appreciate Dan is going to do a special goods movement day, so we didn't talk about that today - but I could just see all these robots running around campus, which what I'm hearing now is that they're very accepted by the students. And that's how you order your coffee and everything.

And I'm thinking, holy cow, we're trying to figure this out for our communities. And we probably don't know what's hit us yet when it comes to this wonderful world in front of us. So, thank you, Chair Nichols. And with that I'll thank everybody.

ARB CHAIR NICHOLS: Thank you for those comments. We do have an awesome responsibility and opportunity to educate ourselves and try to figure out how we can disseminate the information. I was about to say something very similar to what you said about the fact that the State is pretty good at investing in projects, and in building things, not so good at figuring out to get the information out to the people who need and want it.

And I think that's a topic which we could use all, perhaps some education on. But certainly the area

that Mr. Guardino represents is one that has had unique success in working its way into people's minds. And maybe we should try to engage with them.

CTC CHAIR INMAN: They call it go to market and land and expand. So I do know a few words of your lingo,

(Laughter.)

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ARB CHAIR NICHOLS: Okay. Oh, Yes. Sorry.
You're hidden behind the microphone, I guess.
CTC VICE CHAIR VAN KONYNENBURG: Thank you.

Well, I want to just thank again Dr. Sperling.

And I think we did a good job today looking down the road.

However, I think we did a really not so good job dealing

with some issues that are right in front of us. The SAFE

Vehicle Rule and the draft SCS evaluation guidelines are

right in front of us. And if we don't handle those

correctly, they could stop a lot of our agencies from

doing the things that we expect them to do. And I'm

concerned and Director Corley -- Corey, I appreciate your

earlier statement.

However, 18 MPOs have sent in a letter expressing deep concerns about how the evaluation guidelines will be done, and they don't feel like they've been heard. This Board, the ARB Board, gave direction to staff last March. And those -- that direction included that those evaluation

guidelines would be on strategies, actions, and investments. And yet, the current guidelines are all based upon modeling. And these MPOs, especially the smaller ones, have very limited resources.

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I'm concerned about our two agencies working together going forward. I don't -- I don't -- I don't think we're doing such a good job so far. I don't think we're hearing each other. I want us to be successful. I want us to improve the lives of Californians. Right now, I'm not sure we're doing that. I think we're doing a good job at looking out far. But right in front of us, there's a lot of pent up frustration inside this room.

And I'm laying it out on the table. And maybe this is not the right forum. But there's a lot of pent up frustration that we're not hearing each other and we're not listening empathetic to each other.

You heard a lot of comments from different MPOs who are very concerned about these two issues, and they don't feel like they've been heard. So my question is are these -- are these SCS evaluation guidelines, are they going to be adopted by staff or are they going to come back to your Board?

And number two, are they going to be done before -- you know, I'd like to have some more time for us to -- we've had two joint meetings where this topic has

been talked about by people -- members from the audience. And each time they've been desperately asking for more consideration on some items. And they feel like they've been shutdown. And I, for one, feel like they've shut them -- you've shut them down as well.

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I've watched -- when they start speaking, everyone kind of either leaves the room or starts working on something else. So, Madam chair, I really want us to work together well. And I'm concerned that we need to do a better job of listening to each other and listening to the concerns that all of our collaborative partners have around these things.

So hopefully, I didn't foul the good feelings of the meeting, but I have to just tell you that I'm -- I've got some concerns.

ARB CHAIR NICHOLS: Well, you've expressed your concerns. And you've done it very eloquently and emotionally.

I feel on a personal level that there have been multiple meetings and multiple opportunities for staff to meet and talk to each other. And if the results are such that the people that you are attempting to speak for are not happy, that's too bad. But I don't know whether there's an answer to that or not.

However, given that you have taken the time of

the group and this meeting to raise those concerns, I think that what I should do, as the Chair of the Board, is to offer my personal commitment to sit, and listen, and attempt to see if there's someway that we can make those folks feel more like they've been heard and/or that there's a reason why what they're asking for isn't forthcoming. One way or another, I think this is an opportunity perhaps to have another conversation. Why shouldn't we do that?

So I will happily agree to meet with you and all those other people who came in here and explained, or tried to explain, what their concerns are, and we'll -- we'll do our best to see if we can't make some progress.

CTC VICE CHAIR VAN KONYNENBURG: Thank you.

ARB CHAIR NICHOLS: You're very welcome.

Fran.

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Vehicle Rule, Mary, I think in the beginning when we talked about that, we said we'd kind of try to figure out how best to collectively mobilize folks. And I think the first ask we've had of the MPOs is give us some -- give us the project specifics, as best we know them. I'm convinced that the early list probably won't be all-inclusionary, because Vince Mammano is back there from Federal Highways. And he typically tells me don't worry,

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be happy --1 2 (Laughter.) CTC CHAIR INMAN: -- but he didn't say that 3 today. 4 So I think one of the things that we can 5 collectively do is figure out how to communicate early and 6 I would also suggest if there are other states 7 that are in this same, let's listen and see what their 8 9 discussions are going to be. I think the last thing anybody wants is for us to 10 all be handcuffed for 18 months, or 2 years, or however 11 long it would take. 12 ARB CHAIR NICHOLS: I should have said in 1.3 response earlier, but I will say now, I am beyond thrilled 14 that we've identified an opportunity for --15 16 CTC CHAIR INMAN: Yeah. I think it's beautiful. ARB CHAIR NICHOLS: -- us to work together. 17 CTC CHAIR INMAN: Yeah. 18 ARB CHAIR NICHOLS: And I think we do have 19 20

ARB CHAIR NICHOLS: And I think we do have contacts in other states that are interested in these same issues. And we certainly can use the help and support of the groups that are most directly on the line for having to deal with the issue. So, yes, let's talk about that immediately.

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CTC CHAIR INMAN: Yeah. Yeah. And I could see

us even with a matrix or something of the different topics and impacts. And it's always good also to think of solutions. You know, it's one thing to holler, but given the way the federal government is today, there's too much hollering going on, in my opinion. So I don't -- I don't really want to get into the hollering.

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I want to see what we can all collectively do and not get ourselves in a -- what I would describe, would be a real pickle. Because I can't even begin to imagine the pilots -- any -- or the projects -- all the stuff we've been talking about I think could really just slow us down, and the economic development that we've been talking about too.

who -- how -- as many pieces of the puzzle. Because I said earlier, I think a bunch of us knew parts of the challenge, but didn't -- no one was really knitting the whole scarf, so to speak, to show us that it could be pretty devastating. So let's look at what we could do. Let's see if we can identify all of the potential areas and how to get into action here.

ARB CHAIR NICHOLS: I just leaned over to whisper to Mr. Corey that I wanted to be able to say that within a week, we would get back to you and circulate an action agenda on this -- on this issue. And let's build --

CTC CHAIR INMAN: And let's build it together. 1 ARB CHAIR NICHOLS: Yeah. But we'll -- we'll 2 take the lead and -- just in terms of doing a draft, and 3 then we'll get it back to you and take it forward. 4 Thank you. 5 CTC CHAIR INMAN: Well, and you all know 6 everybody is watching us. Send us your ideas, too --7 8 ARB CHAIR NICHOLS: Um-hmm. 9 CTC CHAIR INMAN: -- if there's something that we haven't even thought of. Either send it to the Air 10 11 Resources Board or to our CTC staff, and let's -- let's go into action. I think this is a fun area we could work 12 together. 1.3 ARB CHAIR NICHOLS: Great. All right. Any other 14 issues? Anything else we can do? 15 16 All right. If not, I think I am going to declare this meeting to be adjourned. 17 Thank you, all. 18 (Thereupon the California Air Resources Board and 19 20 California Transportation Commission meeting adjourned at 3:54 p.m.) 21 2.2 23 24

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