



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## ADVISORY COUNCIL REGULAR MEETING

WEDNESDAY  
JULY 8, 2009  
9:00 A.M.

7<sup>TH</sup> FLOOR BOARD ROOM  
939 ELLIS STREET  
SAN FRANCISCO, CA 94109

### AGENDA

#### CALL TO ORDER

Opening Comments  
Roll Call

Harold Brazil, Chairperson  
Clerk

#### PUBLIC COMMENT PERIOD

*Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3. The public has the opportunity to speak on any agenda item. All agendas for Advisory Council meetings and Committee meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Council's or Committee's purview. Speakers are limited to five minutes each.*

#### CONSENT CALENDAR

1. Approval of Minutes of the May 13, 2009 Advisory Council Meeting.

#### DISCUSSION

2. Discussion of Draft Report on the Advisory Council's May 13, 2009 Meeting on California's 2050 GHG emission reduction target of 80% below 1990 levels - transportation sector.

*The Advisory Council will discuss a proposed draft report on the May 13, 2009 meeting with Air District staff and finalize the recommendations.*

#### AIR DISTRICT OVERVIEW

3. Report of the Executive Officer/APCO

Jack P. Broadbent

*Mr. Broadbent will provide an update on pending and planned Air District activities, policies and initiatives.*

## **ACTION**

### 4. Potential Change in Advisory Council Meetings Schedule

*If the Council is unable to finalize the report and recommendations for the May 13, 2009 meeting on California's 2050 GHG emission reduction target of 80% below 1990 levels - transportation sector, the Council may schedule a 2<sup>nd</sup> meeting to discuss the May 13, 2009 meeting with Air District Staff, and develop recommendations for the Air District Board of Directors. If a 2<sup>nd</sup> discussion meeting is scheduled, it will be held on Wednesday, September 9, 2009, and the next topic meeting will be rescheduled to Wednesday, October 14, 2009.*

## **OTHER BUSINESS**

### 5. Council Member Comments/Other Business

*Council or staff members on their own initiative, or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on their own activities, provide a reference to staff about factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda.*

### 6. Time and Place of Next Meeting

*9:00 a.m., Wednesday, September 9, 2009, 939 Ellis Street, San Francisco, CA 94109.*

### 7. Adjournment

**CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109**

**(415) 749-5127**  
**FAX: (415) 928-8560**  
**BAAQMD homepage:**  
**[www.baaqmd.gov](http://www.baaqmd.gov)**

- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities notification to the Clerk's Office should be given in a timely manner, so that arrangements can be made accordingly.
- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the District's offices at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body. Such writing(s) may also be posted on the District's website ([www.baaqmd.gov](http://www.baaqmd.gov)) at that time.

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**  
**939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109**  
**(415) 771-6000**

**EXECUTIVE OFFICE:**  
**MONTHLY CALENDAR OF DISTRICT MEETINGS**

**JULY 2009**

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Regular Meeting	Wednesday	8	9:00 a.m.	Board Room
<b>Board of Directors Climate Protection Committee</b> <i>(Meets 2nd Thursday each Month)</i> - CANCELLED / TO BE RESCHEDULED	Thursday	9	9:30 a.m.	4th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets 3<sup>rd</sup> Monday Quarterly)</i>	Monday	13	9:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	15	9:45 a.m.	Board Room
Board of Directors Ad Hoc Cme. on Port Emissions <i>(At the Call of the Chair)</i>	Thursday	16	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
Joint Policy Committee	Friday	17	10:00 a.m.	MTC Auditorium 101 8 <sup>th</sup> Street Oakland, CA 94607
Board of Directors Mobile Source Committee – <i>(Meets 4<sup>th</sup> Thursday of each Month)</i>	Thursday	23	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
Board of Directors Executive Committee – <i>(At the Call of the Chair)</i>	Wednesday	29	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room

**AUGUST 2009**

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	5	9:45 a.m.	Board Room
Board of Directors Climate Protection Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	13	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	19	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee – <i>(Meets 4<sup>th</sup> Thursday of each Month)</i>	Thursday	27	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room

## SEPTEMBER 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	2	9:45 a.m.	Board Room
<b>Advisory Council Regular Meeting</b>	Wednesday	9	9:00 a.m.	Board Room
<b>Board of Directors Climate Protection Committee</b> <i>(Meets 2nd Thursday each Month)</i>	Thursday	10	9:30 a.m.	4th Floor Conf. Room
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
<b>Joint Policy Committee</b>	Friday	18	10:00 a.m.	MTC Auditorium 101 8 <sup>th</sup> Street Oakland, CA 94607
<b>Board of Directors Mobile Source Committee</b> – <i>(Meets 4<sup>th</sup> Thursday of each Month)</i>	Thursday	24	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room

HL – 7/2/09 (7:35 a.m.)

P/Library/Forms/Calendar/Calendar/Moncal

Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109  
(415) 749-5000

**DRAFT MINUTES**

Advisory Council Regular Meeting  
9:00 a.m., Wednesday, May 13, 2009

**CALL TO ORDER**

**Opening Comment:** Chairperson Brazil called the meeting to order at 9:00 a.m.

**Roll Call:** Chairperson Harold Brazil; Vice Chairperson Jeffrey Bramlett; Council Members, Jennifer Bard, Louise Wells Bedsworth, Ph.D., Benjamin Bolles, Emily Drennen, MPA, Stan Hayes, John Holtzclaw, Ph.D., Karen Licavoli-Farnkopf, MPH, Jane Martin, Dr.P.H., Sara Martin-Anderson, M.P.P., Kendal Oku, Neal Osborne, Jonathan Ruel, Dorothy Vura-Weis, M.D., M.P.H.

**Absent:** Secretary Ken Blonski, Robert Bornstein, Ph.D., Robert Huang, Ph.D., Kraig Kurucz, M.S. and Rosanna Lerma

**Public Comment Period:** There were no public comments.

**Consent Calendar:** Approval of Minutes of the April 8, 2009 Advisory Council Meeting

Dr. Holtzclaw requested the following amendments:

- Page 7, second paragraph; “Mr. Duker said it happened that the numbers ~~ean~~ came out equally...”
- Pages 9 and 11, strike the words, “*for discussion by Advisory Council*” after KEY POINTS and EMERGING ISSUES.

**Council Action:** Member Holtzclaw made a motion to approve the minutes of April 8, 2009, as amended; Member Bard seconded the motion; unanimously carried without objection.

Chairperson Brazil advanced agenda Item 2 to be heard first by the Advisory Council.

**PRESENTATION: CALIFORNIA’S 2050 GHG EMISSION REDUCTION TARGET – TRANSPORTATION SECTOR**

2. California’s 2050 GHG emission reduction target of 80% below 1990 levels - transportation sector - *Speakers from Metropolitan Transportation Commission, University of California, Davis (ITS-Davis), BART & Livable City, and CALSTART presented materials on GHG emission reduction strategies for the transportation sector:*

**B. Vehicle Technology & Travel Reduction**

Dan Sperling  
Professor of Civil Engineering and Environmental Science and Policy, ITS-Davis  
Automotive Related Member of the California Air Resources Board

Ms. Roggenkamp introduced Dr. Daniel Sperling, Professor of Civil Engineering and Environmental Science and Policy, and founding Director of the Institute of Transportation Studies at the University of California, Davis (ITS-Davis), and presented his book, “2 Billion Cars”. Dr. Sperling then gave a PowerPoint presentation entitled, “*What Next for the Transportation Sector?*”

Highlights of Presentation:

- In 2020 there will be 2 billion vehicles globally in 2002;
- GHG emissions have been rising more rapidly in transportation than any other sector – up 120% between 1970 and 2004;
- California GHG policy timeline: 2002--AB 1493 (Pavley); 2006--AB 32 signed; 2008--AB 375 signed and AB 32 Scoping Plan adopted; 2011—LCFS and other early action regulations take effect; 2012—AB 32 regulations take effect; 2020—Reduce GHG emissions to 1990 levels;
- Large GHG reductions are required—need to transform vehicles, fuels and entire transportation systems;
- The California Model—all rules and policies are intended to be compatible with everything done elsewhere in the U.S. and the world. If similar actions are not carried out elsewhere results from California will not be very beneficial;
- Changes are needed in innovation in technology, behavior and institutions;
- Target specific GHG reductions with broad array of rules and incentives through energy efficiency standards, renewables portfolio standard, low carbon fuel standard. Overlay cap-and-trade program (and offsets) to create price signal for carbon and to equilibrate costs across sectors (and gain additional reductions);
- The three-legged stool--Transforming fuels (hard); vehicles (easiest), and mobility (hardest):
  - ❖ Transforming fuels: Today, 96% dependent on oil; future: Wide mix of fuels to power mobility (biofuels, hydrogen and electricity)
- There are many promising replacements and the challenge is how to make the transition to new fuels—need durable, performance-based and market-based policy—low carbon fuel standard:
  - ❖ Transforming vehicles—cars of the future will be far more efficient and will be powered mostly by electric-drive
- Will plug-in vehicles succeed? Battery cost must drop sharply and durability must increase;
- Fix today’s cars—fuel efficiency gains must be converted into fuel economy gains:
  - ❖ Transforming mobility: In U.S. and abroad, we’ve created a transportation monoculture where “sprawl is the law.” There are many opportunities for innovation and (SB 375 law is key).
- Expanded traveler choice is critical;
- Transportation GHG Policy in California:
  - Vehicles (cars and trucks) 39 MM tons
  - Fuels 16+ MM tons
  - VMT and goods movement 5-10 MM tons
- Portfolio Scenario to meet 80% Reduction-achieved through reducing VMT, improving conventional vehicles, biofuels, electricity, hydrogen and electric drive vehicle technology.

5 Point Program to Transform Transportation (policy + technology):

1. Increase R&D investments and train next generation of scientists and engineers
  - Batteries, fuel cells, and lightweight materials
2. Accelerate advanced vehicle commercialization
  - Near-zero emissions requirement (California and US?)
  - EU 50 g/km incentive
  - Tax credits for hybrids, fuel cell, battery-electric vehicles
3. Performance Standards for fuel/GHG
  - CAFE, California Pavley Law, EU g/km standards
  - LCFS (to accelerate use of low-carbon fuels in vehicles)

4. Market instruments to align regulations with market
  - Feebates
  - Fuel price floor
5. Reform institutions and realign incentives to reduce sprawl and VMT
  - Reward reduced GHG/VMT and stimulate investment in new mobility services
  - Remove incentives for sprawl (fiscalization of LU, zoning, engineering rules)

Council Member Discussion/Comments:

- Holtzclaw: Requested a comparison of cap-and-trade and the carbon tax in terms of money raised and spent on technologies to reduce VMT and carbon emissions and questioned how incentives would be used in moving toward more efficient transportation. Dr. Sperling said that generally, cap-and-trade and carbon tax can be made to have identical effects depending upon how they are designed. There will be different effects in different sectors for a variety of reasons and the electricity sector is likely to be most responsive; the transportation sector not very responsive. A \$50/ton tax is equivalent to a 50 cent per gallon gas tax will have some effect but no where near the effects of the Pavley program or the low carbon fuel standard. Policy instruments are needed if substantial change is to be seen in the near to medium term future.
- John Boesel, President and CEO of CALSTART, discussed the increase in gasoline, believed that LCSF's benefit will not be seen until 2018, and he questioned a more near-term solution. Dr. Sperling said a price for carbon or cap-and-trade will have a very small effect on the transportation sector. Therefore, additional instruments are needed and he discussed taxes and corresponding percentages in reductions.
- Bard: Reiterated the public health benefits of reductions in VMT and questioned Dr. Sperling's specific recommendations for the Advisory Council. Dr. Sperling suggested changes in local land use policies, creating institutional structures, setting targets for MPOs to filter down through the city/county level, and changing incentives for land use for infill, TODs, mixed use, higher densities, while making communities better places to live.
- Vura-Weis: Questioned if Dr. Sperling had information relating to fluctuations in gasoline prices and how it impacts behavior. Dr. Sperling said the most important part is the certainty of it; research shows that over the last 4-5 years, people have gotten accustomed to fluctuating prices, and behavior changed only modestly when gasoline increased significantly. People and companies will make individual choices in their lifestyles as to what car they buy, where they move, where they work, they will consider options for driving versus transit, and this is why he likes a price floor so people know it's not going to drop below a certain level.
- Brazil: Questioned how innovations for electric vehicles would move forward for the U.S., and Dr. Sperling said investments are being made in hybrid and electric vehicles and companies see it as a better technology and being able to pioneer efforts.
- Hayes: Said VMT can be controlled, but technology and fuels cannot be controlled at the local level. He asked Dr. Sperling to elaborate on assumptions in order to achieve the 79 MM tons of reduction at the local level. Dr. Sperling said it would be pricing of parking, roads, HOT lanes, fundamental changes of rules dealing with zoning, traffic engineering and standards for minimum parking, road width, traffic flow requirements, innovative and creative transit systems, and taxing.
- Drennen: Questioned if Dr. Sperling had data about elasticity of car ownership with price and specifically any new taxes or fees for car registration. Dr. Sperling said they have good data at UC Davis and a study was being conducted for the State on feebates and determining how people will respond. He said that while people are not very responsive in terms of changing travel behaviors, they are responsive in vehicle purchase behaviors.
- Drennen: Questioned carbon intensities for different types of vehicles and how this could be implemented. Dr. Sperling said the measurement part is not complicated for vehicles; it is the behavior which is more

uncertain. There are a certain amount of people who will spend more to achieve more efficiency and what it represents holistically.

On behalf of the Advisory Council, Chairperson Brazil thanked Dr. Sperling for his presentation.

**A. Regional Transportation Plan 2035: Change in Motion**

Steve Heminger

Executive Director, Metropolitan Transportation Commission

Deputy APCO Jean Roggenkamp introduced Steve Heminger, Executive Director of the San Francisco Bay Area's Metropolitan Transportation Commission and appointed by House Speaker Nancy Pelosi to serve on the National Surface Transportation Policy and Revenue Study Commission.

Mr. Heminger said MTC adopted the Regional Transportation Plan 2035 last month which is the last plan they will adopt prior to SB 375 taking effect. However, it is the first plan adopted with a greenhouse gas emission target. The plan is one of many transportation plans that are climate-friendly; it may be that the Bay Area is restricted in what it can squeeze out of its infrastructure plan, and what is needed is transformation.

Mr. Heminger said MTC expects to spend over \$218 billion in the Bay Area--Maintenance and operations at \$178 billion (81%), transit expansion at \$30 billion (14%), road expansion at \$6 billion (3%), and bicycle, pedestrian and others at \$4 billion (2%). He reported shortfalls at \$40 billion are due primarily to deferred maintenance and investment levels and noted operating shortfalls for several public transit systems.

Transit Sustainability Project:

- Overlapping Routes and Service: Can we continue to afford to serve the same markets with multiple services?
- Night Owl Transit Service: Can we continue to afford to support two dozen transit operators, especially when the result is so complicated that it discourages ridership?
- Bay Area Discount Fare Policies: Can we continue to afford to accommodate inconsistent service policies when simple policy agreements are possible?

Revenue Needed:

Sustainable, dedicated and long-term operating revenue is needed for public transit systems, and \$0.10 per gallon gas tax can raise significant revenue and will be considered in an upcoming election.

Growing Pains:

- Nearly 2 million more people
- 1.8 million new jobs
- Need for over 700,000 new homes
- A tripling in freight volumes

Challenges:

Longer commute distances  
Increasing traffic congestion

Investing in Change:

Progress will be made in pricing and on land use, through:

- Freeway Performance Initiative - \$1.6 billion. The single most important way to reduce traffic congestion and emissions is to put meters from all ramps that lead from the local road network onto freeways.
- Regional HOT Network – creates an 800 mile HOT Network on Bay Area freeways. Through legislative action, HOV lanes are planned to be converted to HOT lanes. The 4% of road expansion over the next 25 years will be limited to: 1) carpools; 2) vanpools; 3) Express bus; and 4) those willing to pay to use it.



- FOCUS - \$400 million for Lifeline Transportation Program, \$1 billion for Regional Bicycle Network, \$2.2 billion for Transportation for Livable Communities Program.
- MTC Resolution 3434 - Most activities overlap in Priority Development Areas. Transit expansion program which will result in additional rail, ferry and bus capacity, two new transit hubs in San Francisco and San Jose is subject to a TOD oriented policy that states in bringing transit capacity to the community, greater density and different land use approaches will need to be seen in order to achieve maximum value of the investment.
- California High Speed Rail – First in the nation, \$45 billion total cost, and State and federal funds are starting to flow.

Mr. Heminger presented a chart which showed reduced congestion 20% below today's levels. To get to such reductions, pricing and land use strategies will need to be implemented well beyond what is being done today. In reducing CO<sub>2</sub>, a target was set to reduce transportation related emissions by 40% to 1990 levels. He said part of this is done through CARB's technology improvements on fuels and vehicles. The 2035 Plan does little to affect emissions, and he presented modeling with added land use, pricing, and some with both land use and pricing, which shows added reductions. However, he believed that SB 375 is a modest step forward; even after achieving CARB targets there is a lot more to do. In terms of vehicle emissions, significant transformation is needed beyond what CARB is proposing. In terms of vehicles miles traveled (VMT), telecommuting needs to go from 3% to 10% market share, as well as and other employee strategies like parking cash-out.

Unfinished Business:

1. Address \$40 billion shortfall for highway, transit and local road repair
1. Improve transit performance – smarter service, fewer systems, sustainable funding
2. Reform federal transportation law as recommended by National Surface Transportation Policy and Revenue Study Commission
3. Change begins at home and breakthroughs are possible.

Council Member Comments:

- Holtzclaw: Questioned how SB 375 planning will encourage zoning changes to allow for mixed use and higher densities. Mr. Heminger believed it will be pushed versus encouraged and will involve CARB setting a target for the region to reduce GHG in the long-range transportation plan, which should be aggressive enough to achieve. He noted that the fact that the Air District is adopting an Indirect Source Rule as well as MTC developing a Transit Oriented Development policy is dynamic for progress.
- Holtzclaw: Referring to financial incentives not to drive as much, he said unbundling parking has been successful in San Francisco and questioned if this will be used to push areas that are built at higher density and mixed use. Mr. Heminger felt this is promising for local government to pursue and he suggested cities not provide as much parking in the first place and, if built, to price it accordingly.
- Mr. Heminger concluded by voicing optimism about challenges and he believed there is willing to experiment and try new things.

**C. Land Use, Public Transit & Trip Reduction**

Tom Radulovich  
BART Director – San Francisco  
Executive Director, Livable City

Ms. Roggenkamp introduced Tom Radulovich, Executive Director of Livable City and BART Board Director, Vice Chairperson of BART's Planning, Public Affairs, Access and Legislation Committee, Vice Chairperson of the Regional Rail Committee, Alternate for the Americans With Disabilities Act (ADA) Liaison Committee, and a member of the Joint Development Liaison and San Francisco Transportation Authority Liaison Committees.

Mr. Radulovich gave a PowerPoint presentation on "*Reducing Bay Area Greenhouse Gas Emissions – Land Use, Public Transportation, and Trip Reduction*", stating there are many challenges ahead, and he discussed the changing environment which calls for different thinking with:

- Climate Change
- Peak Oil/resource depletion
- Cultural shift towards sustainability
- Cultural shift towards walkable urbanism
- Infrastructure deficits

Characteristics of Healthy Systems (Hank Dittmar, *Thinking Like a System*. 1995):

- Conservative: changing fundamental attributes slowly
- Adaptable & typological: composed of basic types that respond flexibly to changed conditions and feedback
- Holistic, integrated, environmentally aware
- Redundant, hence more reliable
- Focus on accessibility, not mobility

Mr. Radulovich presented a graph which shows Los Angeles as one of the densest metropolitan areas with San Francisco following. Interestingly, Copenhagen has similar density but uses one-third of gasoline consumption per capita. He then presented the following charts:

- Cities which are big generators of emissions, northeast San Francisco which, because of its density, is the lowest GHG per capita of anywhere in the region, and therefore, density, livability and transport are the key.
- California CO2 emissions (2000), the vast majority of which is transportation related at 52.4%.
- Driving versus residential density which shows going from 5 units per acre to 10 units per acre, there is an astounding drop in VMT per capita; however, it starts to level off going from 100 units to 150 units per acre.
- Impact of density and transit on driving (San Francisco Bay Area) which shows that with high density and not very good transport, there are still reductions in GHGs.
- San Francisco versus New York: Emissions per capita, auto and public transport emissions for autos and public transport, and percent of US average.

Travel Characteristics of Transit-Oriented Development (TOD) in California: (Holly Lund, Robert Cervero, and Richard Willson, 2003)

- ❖ TOD residents more likely to use transit if:
  - Transit is time-competitive with highway travel
  - There is good pedestrian connectivity at the destination
  - Workers are allowed flexible work hours
  - They have limited vehicle availability
  
- ❖ TOD residents less likely to use transit if:
  - The trip involves multiple stops (or "trip chaining")
  - There is good job accessibility via highways
  - They can park for free at their workplace
  - Their employer helps to pay vehicle expenses (such as tolls, fuel, etc.)

Mr. Radulovich presented an outline from 1974 which showed infrastructure costs associated with different types of development. In comparing garden and high-rise apartments to cluster development and townhouses, there is a lot more infrastructure cost savings relative to conventional suburban housing, which also translates into GHGs.

Mr. Radulovich then presented:

- Copenhagen's "Finger Plan" which strings development along five rail lines radiating from the historic center which allows people to have access to open space and nobody is far from a rail transit station.
- London map from the 1940's and clusters of neighborhoods and walkable communities on neighborhood commercial districts, with nodes served by transport.

Generators of Diversity: (*Jane Jacobs, Death and Life of Great American Cities, 1962*) Primary mixed uses, small blocks, buildings of different ages, and concentration. Mr. Radulovich presented and discussed:

- Leon Krier's organic and mechanical growth, city of communities/city of zones, and functional zones and urban quarters;
- Calthorpe Associates' prototypical transit-oriented development;
- Michael Kiesling's Station access with cul-de-sac and grid plans;
- A London poster on prioritizing sustainable modes through road space resources showing a street full of cars and people which could be put on one bus;
- Examples of walkable cities, an example of Detroit, an abandoned city which rebuilt into an urban forest, or the Renaissance Center;
- Re-conquered cities which are reclaimed from domination by cars;
- A study done from Donald Appleyard's *Livable Streets, 1974* which depicts a traffic and sociability model;
- London's "Cycling Design Standards" which calms traffic in neighborhoods;
- Neighborhoods of "traffic worlds" versus neighborhoods of "social worlds";
- Examples of and uses for improvements to sidewalks, furnishing and sitting areas, pedestrian environments, shared public spaces, integration of grocery stores and temporary uses which lead to healthy lifestyles.

Mr. Radulovich said the country spends as much on parking as it does on its military and he presented an outline of things done in San Francisco which he said Livable City has been a part of since 2002/2003:

- Limiting the amount of parking allowed in office buildings
- Requiring secure bicycle parking in office buildings and parking garages
- Eliminating minimum parking requirements in transit-rich areas
- Establishing maximum parking limits
- Separating, or unbundling, parking costs from housing costs
- Allowing space-efficient parking (valets, lifts, stackers) by right
- Requiring car-sharing in new large residential buildings
- Requiring secure bicycle parking in new residential buildings
- Implementing demand-responsive or market rate parking meter rates

Mr. Radulovich presented a map of the Bay Area in 1869 which shows a well-establishing, emerging pattern of regional town centers and rail and port networks; the Bay Area in 1915 which shows an extensive network of railroads, streetcars, and ferries serving entire populated regions; and the Bay Area in 2009 which shows a re-emergence of a physically integrated regional rail network.

MTC's 2035 Regional Transportation Plan:

- Doubles funding for Transportation for Livable Communities (TLC) program from \$27 million/year to \$60 million/year
- Increasing funding for The Lifeline Transportation Program, addresses the needs of low-income communities (\$400 million)
- Increases funding for Safe Routes to Transit and Safe Routes to School programs
- Funds a comprehensive regional bicycle plan, and fully funds a \$1 billion Regional Bicycle Network (except for the toll bridges)
- Electrification of Caltrain from San Francisco to Tamien (\$626 million) \$6.4 billion for highway expansion
- Shortfalls for Muni capital replacement and maintenance of Muni (\$4.5 billion) and BART (\$7.2 billion)
- No funding for adding BART capacity, and only \$32 million for BART station capacity improvements
- No funding for adding capacity to Muni's crowded light rail and bus lines, or expanding and improving Muni yards and shops
- Unsustainable BART and Muni expansion
- Shortfall of \$13 billion on the \$17 billion needed to maintain state highways

Mr. Radulovich presented strategies for a livable and sustainable Bay Area as:

- End highway expansion;
- Redirect transportation funding towards maintenance and capacity expansion of existing transit, and sustainable transit expansion
- Foster walkable communities near transit
- Create walkable and bike able communities
- Quantify and encourage infrastructure efficiency
- Quantify and reduce embodied energy from cars and infrastructure
- Eliminate or reduce parking requirements
- Unbundle parking from everything, and encourage demand-responsive (aka market rate) parking pricing

**D. Goods Movement**

John Boesel

President & CEO, CALSTART

Deputy APCO Jean Roggenkamp introduced John Boesel, President and CEO of CALSTART, stating that prior to joining CALSTART in 1993 Mr. Boesel worked as an Environmental Business consultant providing services to natural resource-based businesses and non-profit groups.

Mr. Boesel gave a PowerPoint presentation entitled, "*Cleaner and Lower Carbon Truck Future: What Can We Do Now?*" and presented CALSTART's mission statement and discussed their four-part role to grow the clean transportation technology industry. CALSTART sponsored AB 118 (Nunez) which would create new annual \$200 million transportation program in California and AB 236 (Lieu) which establishes petroleum reduction goals for the State's own fleet, and they have assisted the Federal Transit Association develop its Electric Drive Strategic Plan.

Mr. Boesel discussed the following regarding leading edge hybrid and biomethane truck technologies:

- Natural gas as a proven technology in the bus industry; the cleanest of fossil fuels
- The Port of Long Beach/Los Angeles Hybrid Hostler Demo project
- Successes with Hilarides Dairy trucks running on renewable biomethane
- Microgy, Inc.'s development of biogas plants in California
- The California Dairy Industry generating feedstock for biomethane

- Hybrid Trucks – good for public health
- Hybrid Trucks Users Forum (HTUF) funded by the U.S. Army
- HTUF’s 6 core and main working groups – driving industry forward
- Received U.S. Army funding to test 24 Hybrid Electric “Trouble” Trucks
- Hybrid Tractors emerging for regional heavy applications
- Electric “Reefer” units emerging with hybrid systems
- Class 4/5 offerings expanding
- Field pilot testing of Hydraulic Refuse trucks
- Plug in Hybrid trucks are emerging: four utility industry variants unveiled
- Electric trucks – electric fans on buses resulting in 3-7% less fuel consumption
- Electric delivery vans deployed by FedEx in the UK because of congestion pricing
- Top emerging truck technology beyond aerodynamics
- Better designed and modified trailers can cut fuel usage and GHGs through underside skirts, suspension fairings, vortex devices, and nosecones and can deploy when needed

Next Steps:

- Long term and consistent policies:
  - CALSTART Federal Legislative Agenda for high efficiency trucks
  - Extend and augment existing federal tax credit for hybrid trucks
  - Ensure auction revenues from the cap and trade program can be used to provide high efficiency truck incentives
  - Development of innovative federal high efficiency/low carbon truck RD&D program
  - Develop sensible fuel economy metric for M-HDVs

AB 1527 (Lieu) – Integrating Funding Programs for Clean Transportation

*Problem:* Current guidelines make it difficult or impossible to combine air quality funds and climate change funds for the same project.

*Solution:* AB 1527 revises guidelines to allow federal funds and AB 118 funds to be combined with Carl Moyer and Prop 1B funds.

Price Signal Critical:

- High fuel prices resulted in historic change in gasoline and diesel consumption (2006-2008)
- Long Term price signal will stimulate investment in clean transportation technologies
- Increased prices thus far have been the most effective GHG reduction policy
- Cap and trade program unlikely to create significant price signal in transportation sector (20-60 cents/gallon)
- Approaches for State to decrease sales tax and increase gas tax over time, trade-offs with payroll and income taxes, and send a signal that gas/diesel will steadily increase

**PANEL DISCUSSION**

**3. Transportation Sector GHG Emission Reduction Strategies for California and the Bay Area**

Panelists discussed the need for a carbon tax versus cap and trade, a consistent price signal around gas and fuel pricing which will encourage efficiency and a modal shift, the possibility for local governments to adopt resolutions, CARB programs and mobility innovation.

Chairperson Brazil discussed BART’s Strategic Plan and whether it incorporated certain technologies. Mr. Radulovich said BART conducted a study to look at various programs and their impacts, and transit-oriented development without parking access rose to the top. BART found that expanding their systems is not very greenhouse gas friendly and they are encouraging full utilization of the existing system. In terms of technological innovations and efficiencies, BART is conducting lighting retrofits for a 70% electricity savings, regenerative braking on BART cars, installing capacitors, looking at new rail cars which are energy-efficient

and electric station cars, but he said walking, cycling, transit, and technology around vehicles is most effective. With growth, there is also a lot of leverage around land use that is not being realized.

Public Comments: Sam Altshuler asked to look at the holistic energy use and carbon footprint and questioned whether we would be better off burning bio-mass, making electricity and putting that into vehicles in a battery or making ethanol out of the bio-mass and moving vehicles in that direction. He also believed there may be a model and lessons to be learned from the sulfur trading process, which occurred in the northeast in the 1990's. Mr. Radulovich cited the growing size of trucks on the road. He suggested efficiencies with information technology and the potential to place logistic centers on the edges of towns with smaller trucks making deliveries, which would relieve congestion, impacts on roads, and reduce delivery costs.

Council Member Comments:

- Dr. Bedsworth questioned obstacles of implementing ramp metering and questioned whether there was any regulatory authority to require it. Mr. Heminger said Caltrans owns freeway ramps, he agreed metering has a dramatic improvement on freeway congestion which has not been found to significantly impact local street traffic, and trade-off's should be made in terms of emissions and congestion.
- Dr. Bedsworth said heavy duty trucks and equipment are used for many purposes and she questioned if this makes it harder to design policies to affect this sector as opposed to the passenger vehicle sector. Mr. Boesel believed regulators are struggling to develop a standard fuel economy because of the many applications of trucks and trailers, and he discussed Japanese technologies and said hopefully a program will be in place by 2016.
- Ms. Drennen questioned and confirmed with Mr. Heminger that congestion can be reduced through HOT lanes and metering, and noted an example in Minneapolis and its dramatic effects when metering was turned off.
- Ms. Drennen questioned how to best fix the transit shortfall. Mr. Heminger discussed the need for a voter-approved regional gas tax measure that builds things while also taking care of the current infrastructure.
- Ms. Drennen referred to funds already allocated and questioned the possibility of reconsidering committed projects, especially given climate change and limited funding. Mr. Heminger believed the majority of projects are either voter-approved in which case MTC cannot change their allocations, or, projects are well advanced in the project development process. He said when a project is still in the environmental review phase, this is when a good argument can be made.
- Ms. Drennen questioned what the Air District can do in terms of funding and implementing new programs. Mr. Radulovich believed better quantification be done on how market rate parking pricing reduces vehicle trips, congestion and emissions such as: 1) an R&D program that studies the region, 2) grants to understand the relationship between better pedestrian bicycle facilities and increased utilization and bike lanes, 3) support and funding for transit-oriented development and quantification of its effects behaviorally, and 4) further coordination in the application and process of grant funding.
- Mr. Boesel said the United States creates 25% of the world's GHG emissions, believed San Francisco should lead change in innovative technologies, suggested maintaining current toll policies for alternative fuel and high efficiency vehicles, asked the District to back AB 1527 to combine AB 118 and Prop 1B funds, to review its own vehicle registration program, get a new bill authored allowing those funds to be spent on climate change, and revise Carl Moyer Program guidelines.
- Mr. Radulovich supported a higher level of smog check, getting older cars off the road, and, coupled with the buy back program he believed this would improve emissions to impacted communities and

could also spur the purchase of alternative vehicles. Mr. Broadbent confirmed the District has endorsed increased smog check levels.

- Mr. Hayes referred to Mr. Heminger's presentation Slide number 17 and confirmed that the difference between the 2035 Plan and the CARB plan represents the effect of the Transportation Plan. Adding in things like parking pricing, land use planning, and other measures are represented by other alternatives and the band is fairly narrow. Mr. Hayes said there are many good public policy reasons to explore the many options. He referred to the 2035 objective and noted 2/3 of it could be achieved with CARB measures; however, the range of reductions from all others is relatively small.
- Mr. Heminger said their analysis is that transportation is 40% of the inventory and it must achieve 40% of the reduction. It may very well be that more cost-effective CO<sub>2</sub> emission reductions will be garnered from the other sectors first, they may have to do more if the transportation cannot quite do all of its share. He noted it was a proportional exercise and it may not be the way this plays out.

Chairperson Brazil and Advisory Council Members thanked all speakers for their presentation.

**OTHER BUSINESS:**

**Council Member Comments/Other Business** – Chairperson Brazil confirmed that three Advisory Council Members would be attending the A&WMA Conference in Detroit June 16-19, 2009.

**Time and Place of Next Meeting:** 9:00 a.m. Wednesday, July 8, 2009, 939 Ellis Street, San Francisco, CA 94109

**Adjournment:** The meeting adjourned at 12:20 p.m.

Lisa Harper  
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Harold Brazil and Members  
of the Advisory Council

From: Jack P. Broadbent  
Executive Officer/APCO

Date: July 1, 2009

Re: Discussion of draft report for the Advisory Council's May 13, 2009 meeting  
on California's 2050 GHG Emission Reduction Target of 80% below 1990  
levels – Transportation Sector

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The attached draft Report on the May 13, 2009 meeting on California's 2050 GHG Emission Reduction Target of 80% below 1990 levels – Transportation Sector was prepared by Advisory Council members Stan Hayes, John Holtzclaw and Emily Drennen.

The draft report will be discussed by the Advisory Council at its July 8, 2009 meeting.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Gary Kendall  
Reviewed by: Jean Roggenkamp

Attachment



DRAFT REPORT ON THE MAY 13, 2009 ADVISORY COUNCIL MEETING ON CALIFORNIA'S 2050 GHG EMISSION REDUCTION TARGET - TRANSPORTATION SECTOR FOR DISCUSSION BY THE ADVISORY COUNCIL AT THE JULY 8, 2009 MEETING

SUMMARY

The following presentations were made at the May 13, 2009 Advisory Council Meeting on California's 2050 GHG emission reduction target of 80% below 1990 levels - transportation sector:

1. ***Regional Transportation Plan 2035: Change in Motion*** by Steve Heminger, Executive Director, Metropolitan Transportation Commission. Mr. Heminger received his bachelor's degree from Georgetown University and his master's degree from the University of Chicago. He has been appointed by House Speaker Nancy Pelosi to serve on the National Surface Transportation Policy and Revenue Study Commission, which will help chart the future course for the federal transportation program. In addition, Mr. Heminger is a member of the Board of Trustees for the Mineta Transportation Institute and the Board of Directors for the International Bridge, Tunnel and Turnpike Association.
2. ***Vehicle Technology & Travel Reduction*** by Dan Sperling, Professor of Civil Engineering and Environmental Science and Policy, ITS- Davis. Dr. Sperling was honored as a lifetime National Associate of the National Academies, is author or editor of 200 technical articles and 11 books, including *Two Billion Cars* (Oxford University Press, 2009). He has led ITS-Davis to international prominence by building strong partnerships with industry, government, and the environmental community, integrating interdisciplinary research and education programs, and connecting research with public outreach and education. Dr. Sperling is also the Automotive Related Member of the California Air Resources Board.
3. ***Land Use, Public Transit & Trip Reduction*** by Tom Radulovich, Vice Chairperson of BART's Planning, Public Affairs, Access and Legislation Committee. He serves as Vice Chairperson of the Regional Rail Committee and alternate for the Americans with Disabilities Act (ADA) Liaison Committee. He is a member of the Joint Development Liaison and San Francisco Transportation Authority Liaison Committees. Mr. Radulovich is also the Executive Director of Livable City, a non-profit organization whose mission is to create a balanced transportation system and promote complementary land use that supports a safer, healthier and more accessible San Francisco.

4. ***Goods Movement*** by John Boesel, the chief executive for CALSTART. After graduating from the University of California, Davis, in 1982, Mr. Boesel received his MBA from UC Berkeley in 1989. Immediately prior to joining CALSTART in 1993, he worked as an Environmental Business consultant providing services to natural resource-based businesses and non-profit groups. Mr. Boesel began work as the Vice President of Programs for CALSTART and was promoted to President and the organization's chief executive position in the fall of 2001.

## DISCUSSION MEETING

### KEY POINTS

Based upon speakers, members of the public and Advisory Council discussion, below is a summary of the key points made by the four speakers.

1. Widespread and major GHG reductions will be required in California. Under AB32 (California's *Global Warming Solutions Act of 2006*), widespread and major reductions in statewide emissions of greenhouse gases (GHG) will be required. In 2004, California's GHG emissions totaled 469 million metric tons (MMT), but unless steps are taken, by 2020, that total will rise by 27% to 595 MMT. AB32 requires that California's GHG emissions be reduced to 1990 levels (425 MMT) by 2020 and to 80% below 1990 levels (84 MMT) by 2050. To achieve those goals, GHG emissions in 2020 will have to be reduced by 169 MMT (28%) below 2020 business-as-usual (BAU) levels and by another 341 MMT by 2050 (86%). Put another way, achieving AB32's 2050 goal will require net reductions in statewide emissions (510 MMT) over 2020 BAU that are more than all of the GHG emitted by California in 2004 (469 MMT).
2. Transportation is the largest and fastest growing contributor to GHG emissions in California. The transportation sector is the largest contributor to GHG emissions in California, accounting for 38% of the states' GHG emissions in 2004. It is the fastest growing sector, with GHG emissions from transportation rising more rapidly than any other sector – up 120% between 1970 and 2004. At current rates, GHG emissions from transportation will increase by another 26% by 2020.
3. Transportation will have to be transformed. There is no clear, simple and obvious path to achieve AB32's 2050 GHG goal. Rather, a major transformation of the entire transportation sector is necessary. Such transformation may be viewed as a “three-legged stool,” in which we must transform vehicles (“easiest”), transform fuels (hard), and transform mobility (hardest).
  - a. Transforming fuels will require that we shift from near-total (96%) dependence on oil today to a broad mix of lower-carbon fuels in the future, including biofuels, hydrogen, and electricity. What the best mix of fuels will be is still unclear. All fuels have drawbacks, with some even

worse than gasoline. Rather than attempting to pick “winners” in advance, a durable, performance- and market-based policy, such as a Low Carbon Fuel Standard, is needed.

- b. Transforming vehicles will require that cars of the future be far more efficient and be powered mostly by electric drive. Key policies for such transformation include Pavley (AB1493) GHG standards for vehicles and ARB’s Zero Emission Vehicle (ZEV) requirements. Plug-in Electric Vehicles (PHEV) are a promising technology and may succeed, but battery cost must drop sharply and durability increase. Vehicle efficiency (ton-mpg) has increased each year since the late-1980s, but fuel economy (mpg) has remained nearly the same, with fuel efficiency gains used to increase vehicle performance rather than to improve mileage. In the future, fuel efficiency increases must be converted into fuel economy gains.
  - c. Transforming mobility (and thus reducing VMT) will require us to address current land use policies and urban sprawl. Conventional transit currently serves only 2-1/2% of the VMT in the U.S. (although a higher percentage of trips) Expanded traveler choice is critical, with more walkable neighborhoods, conventional transit expanded and new mobility options that include dynamic ridesharing, smart paratransit, carsharing, and NEVs. Passage of SB375 is a step in the right direction.
4. California’s transportation GHG policy addresses all three of the above “stool legs.” Vehicles are being addressed through light-duty vehicle GHG standards (Pavley I and II); the ARB’s ZEV mandate + ZEV incentives [“ZEV” includes battery electric vehicles (BEV), plug-in hybrid electric vehicles (PHEV), and fuel cell vehicles (FCV)]; “feebates” (mixture of fees and rebates to shift costs and incentivize behavior changes); and truck technology (aerodynamic design of cabs and trailer skirts, hybridization of urban and short-haul trucks). Fuels are being addressed through the Low Carbon Fuel Standard. Mobility (VMT and goods movement) is being addressed by VMT reduction via land use, transit and pricing (SB375) and such measures as low-emission requirements at ports, eco-driving, and tire inflation.
  5. A large GHG “gap” exists between currently identified measures and AB32’s 2050 target. While hypothetical scenarios have been developed to examine what will be required to achieve AB32’s 80% GHG reduction target by 2050, currently identified measures are not sufficient to achieve that target. A number of significant, new measures are needed to close the gap. These may include such measures as travel demand management (e.g., pricing incentives, zoning changes, expanded transit, HOV/HOT lanes), vehicle efficiency improvements, and major shifts from oil to lower-carbon fuels (e.g., biofuels, electricity, and hydrogen).

6. Mobility (VMT reduction) is the “stool leg” that is most amenable to local control. Important steps available to local governments to reduce VMT include:
  - a. Land use planning, including general plans and zoning requirements (e.g., allowing and encouraging markets and restaurants in neighborhoods, adequate sidewalks, traffic calming, and lower parking requirements for new development as stated in local planning codes, and eliminating setbacks and in-law unit prohibitions).
  - b. Implementation of SB375, which requires ARB to set regional targets for the purpose of reducing GHG emissions from automobiles and light-duty trucks by 2020 and 2035 and that requires regional transportation plans adopt a sustainable communities strategy designed to achieve regional GHG reduction targets.
  - c. Incentive pricing, including a carbon tax (viewed by speakers as preferable to a cap-and-trade program because of its greater economic efficiency), parking fees, unbundling of parking, high-occupancy toll (HOT) lanes, and bridge tolls (e.g., time-of-day pricing).
  - d. Grants, including merging of statewide funding pools (e.g., for air quality and GHG reduction) and revising agency grant scoring criteria to combine GHG reduction with other criteria (e.g., air district grant award scoring that combines air quality and GHG criteria).
7. The ability of local transportation planning to effect additional GHG reductions from the transportation sector beyond those resulting from ARB-adopted measures is limited. The Metropolitan Transportation Commission’s Transportation 2035 (T2035) Plan includes measures to improve traffic, expand rail, bus, and ferry service, establish new transit hubs, reduce roadway congestion, increase freeway performance through traffic operations systems and ramp metering, improve the efficiency of transit systems, establish a regional high-occupancy toll (HOT) network, and will invest in a Lifeline Transportation Program, a Regional Bicycle Network, and a Transportation for Livable Communities Program. With respect to GHG emissions, MTC projects that CARB actions and implementation of the T3035 Plan will reduce CO<sub>2</sub> emissions from the transportation sector in the Bay Area by 34% over business-as-usual 2035 levels. Almost all of these reductions are projected to result from measures adopted by ARB. Limited additional GHG reduction is projected to result from locally-adopted measures over a wide range of locally-based infrastructure, land use, and pricing policy options. This is due to a variety of factors.
  - a. The Bay Area’s transportation infrastructure is aging and reaching limits to roadway infrastructure expansion. The T2035 Plan projects expenditures of \$218 billion by 2035. Of this, 81% will be required for

maintenance and operations, with just 3% for roadway expansion, 14% for transit expansion, and 2% for bicycle, pedestrian, and other purposes.

- b. By 2035, the Bay Area is projected to have nearly 2 million more people, 1.8 million new jobs, a need for over 700,000 new homes, and a tripling of freight volumes. Commute distances and traffic congestion are expected to increase accordingly.
  - c. Major shortfalls of as much as \$40 billion exist between highway, transit and local road repair needs and available funding. Moreover, significant transit operating deficits exist and are increasing, with routes and services overlapping among two dozen different transit operators.
8. Further improvements in mobility (and resulting reductions in VMT) are possible. Such improvements might be accomplished in a number of ways, including better access to transit, improved transit systems, good urban planning (e.g., livable/walkable/mixed-use communities), and closer proximity between residences and jobs. Such improvements might be accomplished through such measures as more transit-oriented development (TOD), more compact development (with its reduced infrastructure costs and savings on embedded energy/GHG costs), and parking reforms (such as those in San Francisco).
9. Major needs and opportunities for the Air District exist. Although significant and breakthrough technological advancements are needed, major changes in public attitude and behavior related to mobility and transit are also needed to achieve AB 32's 2050 GHG goal. While posing major challenges, this also presents major opportunities for the District. There is an ongoing and important role for the District to continue its leadership in educating the public and other agencies about climate change and the co-benefits that exist between GHG reduction and air quality improvement, including the air quality benefits of livable communities, walking, biking and increased use of public transit, thus helping the public better understand the relationship between personal actions and air quality and climate protection, and proactive steps that can be taken to reduce our carbon footprints. There is a need for continued District assistance and guidance, particularly in such areas as the development of GHG inventories for cities and others, recognizing and addressing the interactions between air quality and SB375 implementation, identification of GHG mitigation strategies and measures for cities, and integration of GHG and air quality considerations in CEQA guidance.

## EMERGING ISSUES

### RECOMMENDATIONS

The Advisory Council recommendations are based on the presentations by the four speakers on May 13th and subsequent discussion among the Advisory Council members.

1. The District has taken an important and widely recognized leadership role in climate protection. We strongly endorse and support those efforts, and we encourage the District to continue them.
2. The District is commended for and should continue its efforts to provide assistance and guidance in the following areas:
  - a. Development of GHG emission inventories for the Bay Area and for communities requesting such assistance
  - b. Development and implementation of climate protection provisions in CEQA guidance
  - c. Development and distribution of a model climate protection element for community general plans
  - d. Development and distribution of model provisions for community climate action plans
  - e. Development and distribution of educational materials regarding such topics as climate protection, the benefits of livable and sustainable communities, and the relationship between personal actions and GHG reduction
  - f. Possible establishment of a climate-related Spare-the-Air-Everyday outreach program.
3. The District should implement an integrated multi-pollutant planning strategy that includes and considers criteria pollutants, air toxics, and GHGs in the development of all non-attainment plans (NAPs).
4. The District should play a major role in the implementation of SB375, including the following:
  - a. Identification and description of key interactions among measures taken to improve air quality and climate protection, particularly the relationship of regional GHG reduction targets to the District's clean air plans

- b. Technical support in the apportionment of regional GHG reduction targets among cities and other entities
  - c. Identification and relative comparison of alternative GHG mitigation strategies and measures for attaining SB375 targets.
5. The District should continue its efforts to integrate air quality and climate protection into its evaluation and funding of grant applications. If needed, the District should also support the statewide merging of funding pools for air quality and climate protection grant programs.
6. The District should continue to work closely and actively with other agencies such as MTC and ABAG in the joint development and implementation of climate protection programs, including the T2035 Plan's sustainable communities provisions.
7. For many reasons, including GHG reduction, the Bay Area cannot afford to delay its efforts to reduce regional VMT. The T2035 Plan would create an 800-mile High-Occupancy Tool (HOT) Network, expanding the capacity of the freeway system to accommodate additional VMT. Recommend freezing lane construction and instead tolling all freeway lanes. Further recommend giving toll discounts to low income and handicapped users, and using the remaining revenues to expand and increase service on public transit.
8. The District should annually or biennially evaluate and rank Bay Area cities and counties on the basis of:
  - a. residential per capita GHG emissions,
  - b. commercial/industrial per employee GHG emissions, and
  - c. enacted planning policies to minimize GHG emissions.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Harold Brazil and Members  
of the Advisory Council

From: Jack P. Broadbent  
Executive Officer/APCO

Date: July 1, 2009

Re: Potential Change in Advisory Council Meetings Schedule

RECOMMENDED ACTION:

If the Council is unable to complete the report on the May 13, 2009 meeting on California's 2050 GHG emission reduction target of 80% below 1990 levels, recommend the Council consider a change in the Advisory Council meetings schedule to provide for two (2) meetings to discuss the May 13, 2009 meeting with Air District Staff, and develop recommendations for the report to the Air District Board of Directors. The first discussion meeting is on July 8, 2009, as originally scheduled, and the second discussion meeting, if required and approved by the Council, would be on September 9, 2009.

BACKGROUND

Because two discussion meetings were required to complete the report on the Advisory Council's February 11, 2009 meeting on Air Quality and Public Health and the discussion meetings are only scheduled for two hours, it is possible that the Council will not be able to complete the report on the May 13, 2009 meeting on California's 2050 GHG emission reduction target of 80% below 1990 levels – transportation sector in a single discussion meeting. This agenda item was added as a contingency in the event that the Council is unable to complete the report on the May 13, 2009 meeting at the July 8, 2009 discussion meeting.

DISCUSSION

To implement this, the September 9, 2009 meeting which was originally scheduled for presentations on the topic of "California's 2050 GHG emission reduction target of 80% below 1990 levels – electricity generation and commercial & residential sectors" would focus on developing and finalizing recommendations for the report to the Air District Board of Directors on the May 13, 2009 meeting.



If required, staff recommends the Advisory Council approve this change in the Advisory Council meetings schedule to allow the Council to complete the report on the May 13, 2009 meeting. The “2050 GHG emission reduction target – electricity generation and commercial & residential sectors” topic would be rescheduled for the October 14, 2009 meeting. This change may require the Council to add more meetings in late November or early December. This issue will be discussed at the July 8, 2009 meeting.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Gary Kendall  
Approved by: Jean Roggenkamp