BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ADVISORY COUNCIL MEETING

WEDNESDAY
NOVEMBER 10, 2010
9:00 A.M.

7TH FLOOR BOARD ROOM
939 ELLIS STREET
SAN FRANCISCO, CA 94109

AGENDA

CALL TO ORDER

Opening Comments — Jeffrey Bramlett, Chairperson
Roll Call — 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 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 purview. Speakers are limited to three minutes each.*

CONSENT CALENDAR

1. Approval of Minutes of the October 13, 2010 Advisory Council Meeting

DISCUSSION

2. Discussion of Draft Report on the Advisory Council's October 13, 2010 Meeting on California's 2050 GHG Emission Reduction Target of 80% Below 1990 Levels – Strategies and Technologies for the Transportation Sector

   The Advisory Council will discuss the Draft Report from the October 13, 2010 Meeting with Air District staff and finalize the recommendations.

3. Discussion, Recommendation and Selection of Slate of Officers for 2011

   The Advisory Council will discuss, recommend and select a Slate of Officers for 2011.

OTHER BUSINESS

4. Chairperson's Report — Jeffrey Bramlett, Chair

5. Council Member Comments/Other Business

   Council members may make a brief announcement, provide a reference to staff about factual information, or ask questions about subsequent meetings.

6. Time and Place of Next Meeting

   9:00 a.m., Wednesday, January 12, 2011, 939 Ellis Street San Francisco, California 94109.

7. Adjournment

CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109

(415) 749-5130
FAX: (415) 928-8560
BAAQMD homepage:
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) 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

NOVEMBER 2010

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Advisory Council Regular Meeting	**Wednesday**	**10**	**9:00 a.m.**	**Board Room**
Joint Policy Committee Special Meeting	**Friday**	**12**	**10:00 a.m.**	**MTC Auditorium 101 – 8th Street Oakland, CA 94607**
Board of Directors Personnel Committee *(At the Call of the Chair)*	**Wednesday**	**17**	**9:00 a.m.**	**4th Floor Conf. Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**17**	**9:45 a.m.**	**Board Room**
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)*	**Thursday**	**18**	**9:30 a.m.**	**4th Floor Conf. Room**
Board Executive Committee *(At the Call of the Chair)*	**Monday**	**22**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)* **- RESCHEDULED TO NOVEMBER 18, 2010 at 9:30 a.m.**	**Thursday**	**25**	**9:30 a.m.**	**4th Floor Conf. Room**

DECEMBER 2010

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting ***(Meets 1st & 3rd Wednesday of each Month)***	**Wednesday**	**1**	**9:45 a.m.**	**Board Room**
Board of Directors Legislative Committee *(At the Call of the Chair)*	**Monday**	**6**	**9:45 a.m.**	**4th Floor Conf. Room**
Board of Directors Stationary Source Committee Meeting *(At the Call of the Chair)*	**Monday**	**13**	**9:30 a.m.**	**Board Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**15**	**9:45 a.m.**	**Board Room**

December 2010 Calendar Continued on Next Page

DECEMBER 2010

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Joint Policy Committee Special Meeting	**Friday**	**17**	**10:00 a.m.**	**MTC Auditorium 101 – 8th Street Oakland, CA 94607**
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)* **- RESCHEDULED TO NOVEMBER 18, 2010 at 9:30 a.m.**	**Thursday**	**25**	**9:30 a.m.**	**4th Floor Conf. Room**

HL – 11/4/10 (1:00 p.m.)
P/Library/Forms/Calendar/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Bramlett and
Members of the Advisory Council

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 2, 2010

Re: Advisory Council's Draft Meeting Minutes of November 10, 2010

RECOMMENDED ACTION

Approve attached draft minutes of the Regular Advisory Council's meeting of October 13, 2010.

DISCUSSION

Attached for your review and approval are the draft minutes of the October 13, 2010 Advisory Council meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

AGENDA: 1

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, October 13, 2010

CALL TO ORDER

Opening Comment: Chairperson Bramlett called the meeting to order at 9:08 a.m.

Roll Call: Chairperson Jeffrey Bramlett, M.S., Vice Chairperson Ken Blonski, M.S.; Council Members Jennifer Bard, Benjamin Bolles, Harold Brazil, John Holtzclaw, Ph.D., Kraig Kurucz, M.S., Gary Lucks, JD, CPEA, REA I, Jane Martin, Dr.Ph.D., Debbie Mytels, Kendall Oku, Jonathan Ruel and Dorothy Vura-Weis, M.D., M.P.H.

Absent: Council Members Louise Bedsworth, Ph.D., Robert Bornstein, Ph.D., Alexandra DeSautels, Robert Huang, Ph.D., Stan Hayes, Rosanna Lerma, P.E., and Michael Sandler

Also Present: Board Chairperson Brad Wagenknecht

Public Comment Period: There were no public comments.

Consent Calendar:

1. Approval of Minutes of the September 8, 2010 Advisory Council Meeting

Council Action: Member Blonski made a motion to approve the minutes of September 8, 2010; Member Vura-Weiss seconded the motion; unanimously carried without objection.

PRESENTATION: CALIFORNIA'S 2050 GHG EMISSION REDUCTION TARGET – STRATEGIES AND TECHNOLOGIES FOR THE TRANSPORTATION SECTOR

2. California's 2050 GHG Emission Reduction Target of 80%, Below 1990 Levels – Strategies and Technologies for the Transportation Sector

A. Land Use and Public Transportation
Stuart Cohen
Executive Director
TransForm

Deputy APCO Jean Roggenkamp provided an introduction of Stuart Cohen, Co-Founder and Executive Director of TransForm.

Mr. Cohen introduced TransForm's mission and growth from primarily focusing on county and regional transportation advocacy to working on local programs which engage communities in planning. He gave a PowerPoint presentation and began with a slide of TransForm's look at children as an indicator of measuring societal issues regarding transportation, climate, and land use. Funding for safe routes to school programs will change the mindset and get kids walking and biking more.

He said the Bay Area has been subsidizing growth with a lot of transportation investment that has focused on moving cars quickly or in moving people quickly on transit and predicting where the growth would be happening. In 2001, with support of the Air District, the Smart Growth strategy was undertaken to reverse the cycle which he believed led to SB 375.

He said TransForm conducted an analysis in a report called *Windfall for All* last year that looked at what people are spending versus what government is spending on transportation. Government spends about 7 times more than what individuals spend, and when looking at solutions, the potential benefit needs to be quantified at the personal level. He said low income families are hit hardest with paying for transportation with 19% being the overall percentage for spending out of earned income. Society has been designed around cars as families are spending so much time driving. The cycle needs to be broken for financial and climate reasons, as well as health and cognitive components.

Mr. Cohen presented very high transportation costs in low-transit areas and their analysis reveals that these same areas have high carbon emissions. He discussed transportation spending and CO2 emissions by transit connectivity which show that places with the highest transportation access spend $8300 a year and emits 3.5 metric tons of CO2 emissions. Those with the highest transportation access emitted 42% less than the other 80% of the Bay Area combined.

Regarding solutions, he discussed SB 375 which is the major framework where change will occur. SB 375 sets greenhouse gas targets for each of the 18 major metropolitan regions and each region will try to meet targets. It is supposed to integrate transportation, land use and housing planning, as well as investment in the region to better meet targets. The most ambitious scenario MTC ran showed an 18% reduction in GHGs might be able to be achieved from reduced driving, but this figure does not take into account cleaner vehicles and fuels. The more achievable scenario chosen was 15% by 2035, and MTC's modeling shows that it does not matter much where money is being spent, but it is more about land use pricing and Transportation Demand Management (TDM) measures like commuting. He questioned, however, if more could be done with infrastructure in transit expansion.

Mr. Cohen said there are five primary levels; regional scale which must be coordinated with a city scale, and then down to each transit corridor, down to a neighborhood scale and then down to the site scale. Things must be done correctly at each scale if large changes are to be made.

He said at the regional scale, planning will be done for a Sustainable Community Strategy (SCS). Planning for the SCS is underway and there will be four elements; 1) a land use projection which will identify how the Bay Area's transportation and jobs/housing balance will grow; 2) a transportation network plan, which will identify where money will be spent on transportation infrastructure; 3) a TMD plan which will have both policies and investments; and 4) a systems management which looks at things like systems pricing and things that can make traffic move more freely.

The next element of SB 375 is once SCS's are created, those take the land use projection and it becomes the basis for a Regional Housing Needs Allocation (RHNA). Each Bay Area city will get a certain amount of housing projections for an 8 year period and they will need to identify areas within their cities to place housing, which also must have an affordability factor. If done well, it can be a strong affordable housing motivator. Putting the right things along transit lines must also be reviewed, as well as the right mixes for people to get to jobs and housing easily.

The fourth area is the neighborhood scale which is where rezoning must occur. Within 3 years of adopting a housing element, areas must be rezoned to match the housing element. If followed, this will be one of the strongest components of SB 375 and he believes this is the most important area to get neighborhoods engaged.

At the site level, SB 375 brings in the building industry with the thought that if a site is in one of the areas destined for development it can get some amount of streamlining. It can either exempt it from GHG analysis at a regional scale and look at alternative sites that are less dense or in Greenfields or fully exempt it if significant criteria are met.

Mr. Cohen asked if there were clarifying questions of Advisory Council members.

Vice Chair Blonski questioned the case of neighborhoods being comfortable in being what they are and do not want to be rezoned to change its structure. Mr. Cohen said the default is paving over orchards; people need to come to grips with either having less job growth in the Bay Area or providing homes for people that do. He said rezoning is just for housing under SB 375, and he is hoping that a lot of single family home areas are not going to be appropriate places to grow. To the extent growth occurs, there are second dwelling units or other additions, but density will most likely occur along major growth and transit corridors throughout the region. TransForm has found there is a lot of resistance to growth or change of any kind, and this must be about how to provide what amenities people are missing in the community and ensure it is part of the plan. Where this occurs, there is a combination of much less resistance and incredible support for change, and includes growth in densities. He said all future growth can be accommodated in four and five story developments, and it is fully up to cities where growth takes place.

Dr. Holtzclaw stated density is important, as well as destination locations. He questioned how to get cities who are used to certain things to change, whether there will be specific pressure or guidance to allow markets, libraries, and other amenities in residential neighborhoods where they are now excluded by zoning laws, as well as reduced parking requirements. Also, he asked if narrowing sidewalks and streets be a part of those changes. Mr. Cohen said this is where SB 375 is not prescriptive or heavy-handed; it does not talk about parking, sidewalks, and it is essentially the realization of regional planning. It says each region gets to choose the strategies it thinks will be able to meet those targets. But, in all major regions, cities are looking at parking as a major element but the law does not dictate it.

Ms. Mytels referred to slide 14 and confirmed that PDA's are Priority Development Areas, a concept that the Joint Policy Committee put forward as a way to ask cities voluntarily where they would like to concentrate future growth. Most cities have designated at least one PDA, with the goal over time to make sure they are getting resources they need.

Mr. Cohen then discussed challenges on slide 17, stating one of the largest is transit funding and expansion. The region has an extensive transit network and this is why financial savings per person is so much larger than any other region in California at $5,400 per person, which is $3800 in the next best region of Los Angeles. There have been severe cuts and shortfalls of $7 billion to operate the existing system and $18 billion to maintain it in a state of very good repair. He said there are also unfunded shortfalls of nearly $10 billion to expand the planned expansions, such as rail, ferry and bus. As they get into the SCS process, they will grapple with how to deal with $25 billion of maintenance and operation shortfalls and also deal with plans for expansion and reconcile them.

Mr. Cohen presented slide 18, which is the Oakland Airport expansion, and said the price quadrupled, the projected ridership plummeted by over 70%, but it was promised to be built even though there was a faster and more popular alternative proposed. He said a model for doing this is Caltrain who had a 70% increase in ridership and a 40% increase in cost. Over the next two years, MTC is doing a Transit

Sustainability Study which he thinks will be one of the key ways to address shortfalls. They found only Caltrain had service and ridership increase more than their costs because they had engineers and planners who said they could have a much more efficient use of tracks and went to a skip, stop and express service. There is also a proposal of up to 800 miles of High Occupancy Toll (HOT) lanes. Toll lanes would convert existing high HOT lanes and allow solo drivers in for a fee if there was excess space. TransForm would like to see net revenues to go to transit expansion and expanding choices as opposed to helping to fund further out expansions of the highway system. The debate will occur over the next year and MTC hopes to have a plan to bring to the California Transportation Commission by July of 2011.

Mr. Cohen discussed other things they would like to see expanded during the SCS as:

- Bicycle and pedestrian build out
- MTC's new Transportation Climate Initiative
- Safe Routes to Schools
- Regional parking program
- Funding for TOD and affordable housing

He discussed their Great Communities Collaborative which TransForm co-sponsored engaging 25 communities and community planning around transit. He presented an example of downtown San Leandro which was zoned for 500 homes around the transit system. People were not happy with it; they had a community planning process that led to 7 times the density with amenities like child care center, bike lanes, shopping, pedestrian friendly areas, and it led to significant support by the community.

In conclusion, Mr. Cohen said he gave a presentation on SB 375 to the National Governors Association and there are many interested in replicating what California is doing. To him, California has been building in the region for a long time. For each of the scales presented on slide 27, there is no single silver bullet, but people need to continue doing things such as education and engagement, regional vision, bring them down to the local level and make it personal for people. He said TransForm is working on a project due out in a couple of months called, Envision Bay Area, which will allow people to formulate their own visions for the future and see what the outcomes are. In addition, broad support must be given to cities and areas taking new growth. There are a number of ways to do this; prioritizing infrastructure, providing more planning grants, rewarding innovation, bring to scale projects. He noted that Slide 27's last column indicates the regional fit which SB 375 is about and California is far ahead of any state in making that happen. California has a chance to make this a model, achieve targets, save money and lungs, and have more vibrant communities.

Mr. Cohen thanked the Advisory Council for the opportunity to provide his presentation, and noted TransForm's website is www.Transformca.org, which has *Windfall For All* on it as well as a good Fact Sheet on what SB 375 does.

B. Parking Management
Jeffrey Tumlin
Principal
Nelson\Nygaard Consulting Associates, Inc.

Deputy APCO Jean Roggenkamp provided an introduction of Jeffrey Tumlin, Principal with Nelson\Nygaard consulting Associates, Inc.

Mr. Tumlin spoke of his Advisory Council experience 15 years ago representing Stanford University Campus. He said his presentation will focus on why parking is important from an air quality and CO2 perspective as well as other social perspectives. He will discuss some high return municipal parking reforms, how regional agencies can make that happen, benefits, and key recommendations that the Air District can do.

Mr. Tumlin said parking is outrageously expensive and he would argue the most over-regulated commodity in our society even more so than pharmaceuticals. It is the only commodity that governments require private entities to produce in gross abundance. We would never think of forcing developers to build housing for people or add bedrooms but we think nothing about forcing them to build more parking than the market would ever warrant. Implications of this over regulation are bad. Parking worsens housing affordability for every space that comes with a residential unit. Prices of housing increases by 30% and decreased is the number of units that can be built on a parcel by about 15%-25%.

Working families spend an inordinate amount of income on driving as a result of auto dependency and are forced to live in places where housing is affordable but transportation is not. For every car a household can remove, they can qualify for an additional $100,000 in mortgage, which is the cost of operating a car over 30 years. Also, a parking space including drive isles takes up about 300 square feet which is about the size of an efficiency studio apartment.

They also know that vehicle ownership is determined in part by income but only to a certain degree. Once they become an even lower middle class, people tend to own the same amount of cars and it varies tremendously by location in places where it is possible to get to school and other places. However, households will own significantly fewer cars and even in suburban locations, significant numbers of households do not own cars at all, such as seniors. There are even young adults that do not want cars even though municipalities are forcing developers to assume all households must have a specific number of cars.

When they array development in a conventional manner where each use is separated from each other along a big arterial and each use has a separate parking requirement, there is more parking area than development area and it results in traffic patterns. He presented trips and parking examples and another example of downtown Mill Valley where there is mixed use with shared parking depending on their demand, which allows them to park once, walking, grocery shopping, and only half of the parking and land area are needed, one-quarter less in arterial trips, one-sixth less in arterial turning movements, and ¼ less vehicle miles traveled simply by arranging land uses and parking in a different manner. Yet, there are still cities that set parking requirements well in excess of demand which results in supply exceeding demand which means the market price of parking is zero, less development capacity, lower land value, higher costs, the assumption of automobile dependency and design, which produces the political need for high minimum parking requirements and auto dependent land forms, to equal air quality impacts and traffic congestion impacts in all counties. He said having parking as the most expensive commodity and free to users is not only economically inefficient, but it creates excess traffic, VMT, and other impacts on society.

From data compiled by Professional Donald Shoup; "Evaluating the Effects of Parking Cash-Out: eight Case Studies," 1997, parking behaves like every other commodity and if you reveal the cost of it, people make different choices regardless of context including in places where there is no transit. He said many communities all over the country have recognized the current approach makes no sense and they have looked at several changes including enforcing California a parking cash-out law that requires employers of 50 or more people who do not own their own parking but lease it separately and provide it free to employees, to offer the cash value of that parking to employees who do not drive, and there is no enforcement. The law states that if an employer gives its parking away free, but this is an enormous transportation subsidy to those who choose to drive. He said there are so few employers who do not control their own parking who are 50 or more and they have not yet found any who follow the law. One idea is to make the law apply to more employers and to provide incentives to make the law work.

The second idea is to charge market rates for parking in high demand areas. This only makes sense from a good business perspective. Cities like Redwood City, San Francisco, and Walnut Creek have realized they

make more money off of a successful commercial district than off of their parking meters and the reason they charge for parking is to provide availability for customers, which results in more revenue to them and more business.

Another key reform is to unbundle the cost of parking from the cost of housing and from commercial leases. It does not make sense for either apartment complex or for an employer to offer parking cash-out or to charge for parking if they are forced to take more parking than they actually need. So, parking cash-out and parking pricing works if you can get rid of the parking you do not need. Requiring this in the course of development is an exceedingly important reform.

Another key reform is eliminating key requirements for parking and instead, substituting parking maximums, which even small cities like San Mateo has done. San Mateo has recognized in its rail corridor area that if they wanted to require developers to get a 30% reduction in trips, they cannot allow developers to have any more parking spaces than the trip cap. Otherwise, employers have no incentive for following the trip reduction requirement. Therefore, San Mateo and San Francisco have low parking maximums.

Finally, to create value out of under-utilized parking lots, you need to increase the allowable Floor Area Ratio (FAR) for businesses and property owners that reduce their parking demand. What is needed is to allow property owners to capture the value of their reduced parking, take the money and use it for community improvements or to fund their parking cash out program, similar to what Genentech does. He said Genentech in South San Francisco is far from any public transportation. They were growing and could not buy out their neighbors rapidly enough and they were stuck with needing to build more lab space on their existing surface parking lots. In order to do so, they needed to fund very expensive parking structures. What they realized is that it was cheaper for them to pay their employees not to drive than it was to build new parking structures for them. Genentech now pays employees $4 per day who do not drive, which has offered a remarkable marketing plan. The program only made sense for Genentech because the City of South San Francisco was a partner. They reduced the minimum parking requirement so they could free up surface spaces, they increased the allowable FAR recognizing that density restrictions are a proxy for traffic restrictions. By Genentech agreeing to reduce vehicle trips, the City did not care what the allowable density was provided the height of the buildings matched the scale of the community. So, the City reduced minimum parking requirements, allowed more development, and Genentech captured the value on making employees happy rather than building very expensive parking structures. The result has been that over a period of three years commute-related GHG reduction by 8.6% which has improved over a year. They have examples of other employers who cut GHG's by over 20% in better locations.

Therefore, in identifying what can the region do in making sense out of parking as a means for improving air quality, reducing congestion and CO2 emissions, barriers need to be recognized. Key among the barriers is that people do not fully understand parking. There is a lack of coordination among different government entities between the public and private sectors. There is perception of problems by the retail community for fear we will overprice parking and therefore drive customers away the myth of which needs to be dispelled. There is significant neighborhood concern about spill over parking which is a significant problem that needs to be eliminated. And, there is an absence of a constituency about reform, and no one is demanding taking away parking subsidies.

Some strategies they helped develop for MTC which were presented to the Joint Policy Committee is:

1) For each of the regional agencies to lead by example by revealing the true cost of providing parking to their own employees and visitors;
2) To incorporate parking reform policies into all grant programs. When offering money to municipalities or to employers to run shuttle programs and other good things, those will be

awarded more points if they make sense from their parking requirements and parking management principles;

3) Reforming the Congestion Management Agencies (CMAs) which is critical the District needs to be aware of. Currently, CMA's are responsible for most transportation funding allocation and determining which projects get funded and which do not. Their job is to reduce congestion by accommodating more cars. The formulas by which the CMAs reward themselves say more driving is better and we need to facilitate more driving by widening roads and by throwing money at capital projects. CMAs need to be given the responsibility for reducing congestion, not by accommodating it, but by actually reducing per capita vehicle miles traveled. If this one thing is changed, all transportation funding priorities in the region would suddenly change dramatically;
4) Extending regulations to parking, which is where the Air District comes into play with thoughts of implementing indirect source regulation. It is hard to determine what is the property role of government in solving a problem that government over-regulation has created;
5) Conditioning discretionary transportation funding on parking reform, which is more an MTC issue but it can also be that for all the money that the Air District awards;
6) It could require that the entity has implemented a full array of parking reform measures including the gas tax or extension of the GHG cost recovery fee; and
7) Advocating elimination of the federal tax subsidy for employee parking. Currently, parking can be paid on a pre-tax amount. If the federal tax subsidy was eliminated for parking and driving, it generates $52 billion a year nationwide and helps to make the economy more efficient at the same time.

There is interest in parking reform because it has an extraordinarily high impact not only in terms of reducing CO2 emissions but reducing vehicle miles traveled, congestion and a host of other things. By implementing the array of items in new development, vehicle miles traveled can be cut by up to 50%, and by in existing development, by 22% to 30%. While land use is the big solution for air quality, it has a tremendous amount of inertia. If there is any hope of meeting targets by 2015 or 2035, existing development has to be affected, and there is no better way of doing this than parking. Parking reforms earn about $2000 per ton of CO2 removed. In their examinations of CO2 cost curves, parking reform comes out on top both in terms of the total tonnage removed, as well as the cost for earnings per ton removed. It is also socially equitable.

He noted that almost 38% of CO2 emissions come from the transport sector and of that and 72% is personal driving, which means if roadway pricing is not done, politically, there is greater political tolerance for pricing the trip end than there is for the trip itself. In fact, it is also a lot easier to do and just as effective.

Mr. Tumlin presented Slide 20; the McKinsey cost curves, *Pathways to a Low Carbon Economy, 2009* and said the items on the left side of the charter are programs that earn money per ton of CO2 removed. They are mostly things that make more efficient use of what exists. In looking at more detail at local and regional cost curves, i.e. BART, any of BART's capital projects such as rail expansions and adding parking to existing stations is good for CO2 but very expensive. The very bottom of the chart shows things that BART can do to reduce CO2 emissions and the one very effective is charging the right price for parking at its stations.

In conclusion, regarding questions of what the Air District can do, he recommends six things:

1. Start focusing on removing the barriers; reasons why parking is over-regulated. One is to address fear of parking spillover head on by using grant programs to help municipalities to do good parking planning including the usual things like residential parking permit districts, parking

benefit districts, community education. This can be done in partnership with MTC which is already creating a grant program.

2. In partnership with MTC, invest in good parking technology. Parking meters that only access quarters should be made illegal, and the transactional cost of parking needs to be eliminated. There are arrays of technology which can get out into the market in order to eliminate the transactional cost of charging for parking which is so much greater than the actual cost.
3. Use regulatory authority to start requiring the unbundling of the cost of parking from the cost of housing and from the cost of commercial leases. This allows the existing state parking cash out law to begin for commercial properties, and it allows residents with several cars to choose more parking and residents with fewer cars to choose less parking, and residents with fewer cars can afford to buy more housing. Unbundling is already occurring in urban areas of the region. Incentives are needed to get developers to do it elsewhere and to force municipalities to allow it, as it is currently illegal in most jurisdictions.
4. Start taking on the problem of excessive minimum parking requirements at municipalities. This can begin through incentives, by conditioning grant programs on having municipalities get smart on their minimum parking requirements, or direct regulation. In the United Kingdom, minimum parking requirements are illegal as a matter of national law because they are recognized to be serving only social and economic ills.
5. Start thinking about a regional parking fee. He said Vancouver had a short lived regional parking fee that charged a per parking space fee on the property tax bills of all property owners in the region, which was undone in part because of how poorly it was implemented and the fact that high parking space owning suburban places had no way of getting rid of parking. There was no incentive program built into it. Were we to propose a parking fee in this region, he suggested it be a use fee rather than a property tax, so the fee be charged to whoever was operating the parking, and more importantly, that the fee be graduated to encourage the kind of behavior we want to see. If the parking operator was charging market rate for parking on an hourly basis or offering parking cash out, the fee should drop to zero and that the impact use fee only be charged on those operators that are giving their parking away for free that are subsidizing parking and encouraging excessive vehicle miles traveled. He also suggested that net revenues generated by the fee go back to the municipality where they were generated in the form of grant programs to help deal with other ways of reducing VMT can address social equity problems of any fee implemented.

C. Plug-in Hybrid Electric Vehicles
Simon Mui, Ph.D.
Scientist, Clean Vehicles and Fuels
National Resources Defense Council

Deputy APCO Jean Roggenkamp provided an introduction of Dr. Simon Mui, Scientist with National Resources Defense Council's Air and Energy Program.

Dr. Mui said NRDC's position has been the best solution is to design and avoid the need to drive by providing mobility choices. The second best solution is to make remaining driving that is needed as efficient as possible. The third best solution is to make the fuel that is burned as clean as possible.

Regarding Plug-in Electric Vehicle (PEV) technologies, he presented the various types of PEV's being launched, how many are coming to California, and said the question is what is being done to help reduce emissions over time. He presented a graph of where California would be if there were policies on the books in California implemented successfully; a business as usual case with fixed efficiency of vehicle technologies and population growth projections; with Pavley 1 together with the Low Carbon Fuel Standard (LCFS), SB375, and California is on a progressive course. Over time, much more is needed in VMT growth in order to meet 80% reduction targets below 1990. Luckily, California has been leading

the nation in terms of reduction targets as well as what it will accomplish if programs are adopted successfully.

Dr. Mui discussed how PEV's fit in. One area of attention is the automotive launches of battery electric vehicles, capital expenditures, and product plans coming out. He stated Baum and Associates reviewed vehicle plans of automakers over the next five years and they looked at the product plans, investments by auto makers and develop a forecast for parts suppliers, the list of which is growing.

He reviewed the various PEVs being launched for the U.S. market and presented cumulative sales over time. It is expected that over one million vehicles will be on the road by 2015 with consumer incentives, financing mechanisms, hybrid performance and cost improvements in batteries.

He said key drivers include:

State and federal environmental regulations and policy:
- Next round of National GHG emission standards and California Standards;
- Low Carbon Fuel Standard (LCFS);
- ZEV Program;
- CPUC PEV proceeding;
- Economy-wide Clean Energy and Climate Bill;
- State PEV Collaborative

Infrastructure:
- Roadmap and coordination
- AB118
- Clean Fuels Outlet
- LCFS credit incentives
- Other federal/state investment or incentives

Dr. Mui reviewed GHG emission reductions from PEV deployment and said significant GHG reductions can be achieved from PEVs, significant reductions in oil consumption, and a cleaner electricity sector. He presented an aggressive electric vehicle technology scenario getting about 55 mpg, and there is still some improvement for a battery electric vehicle versus today's conventional baseline vehicle. Over time, if a utility cap can be developed or a product placement, higher emission reductions can be achieved. And, if taking into account a utility cap over time together with the initial placements being on the coastal states, and consider the lifetime of the vehicle as a whole, you get to an extremely low vehicle emission. And PEV's will need to be deployed in a commercial scale in order to meet future standards. Dr. Mui then provided various analyses of targets, aggressive cases, fuel volumes needed, and future projects to reach goals.

The amount of electrified miles in the light duty sector that they see as necessary is between 50% to 70% of all miles moving forward by 2050. It means an aggressive ramp-up in terms of vehicles deploying over the next 10 years, focusing on a successful launch of plug-in vehicles to drive down the cost of energy storage, bring economies of scale, determine ways to finance upfront costs and bring back savings to customers.

In summary, Dr. Mui said needed are continued standards pushing both vehicles, VMT reduction and low carbon fuels continuously, such as future Pavley, future national program for fuel economy and vehicle tailpipe standards for heavy duty trucks nationally. A lot of market success will determine how fast and far California can push. And with pushing, they should be able to achieve 60% below 1990 levels for on-road vehicles. Many consumer advocate groups have a campaign of 60 mpg's by 2025 and information can be found on www.go60mpg.org. They are looking at achieving 3 million barrels per day reduction in

oil consumption, over 500 million metric ton reductions by 2025, and a 35% reduction in fuel consumption from long haul, tractors and trailers, which will go a long ways in addressing the heavy duty sector in terms of fuel efficiency and GHG emissions.

In terms of questions presented regarding measures the District can focus on, there has been a lot of work in leading a regional effort, and the Air District has and should continue to support Electric Vehicle Charging Service Equipment (EVSE) deployment. While this proposal was not funded, the action plan was to take existing charging structures and upgrade them, determine where to locate public charging, ensure residential charging which will accomplish 90% of charging needs goes forward smoothly, streamline customer experiences, identify environmental and social benefits to get cities engaged, highlight strong local government roles to stimulate the market; support projects that provide public with high exposure to PEV's, support partnerships with companies, work with stakeholders to ensure all new residential and commercial buildings are PEV ready with necessary wiring and panels, and develop and support innovative financing mechanisms to help buy down the upfront costs of PEVS or charging infrastructure.

The Advisory Council and staff thanked the speakers for their presentations.

BREAK
Chairperson Bramlett called for a break at 10:56 a.m., and thereafter, the Advisory Council reconvened the regular meeting at 11:01 a.m.

PANEL DISCUSSION

3. Transportation Sector Strategies and Technologies for California and the Bay Area

Chairperson Bramlett called for questions of Advisory Council Members.

Ms. Bard said one year ago, we had a panel discussion on transportation sector where some items were touched upon. She said Mr. Tumlin had mentioned one of the most important things that could be done is to change what Congestion Management Agencies (CMA's) are doing in terms of parking requirements. Other recommendations could come forward with how the District could work with CMA's. She asked what topic recommendations Mr. Tumlin could see for the transportation sector in terms of strengthening key areas of what is currently being contemplated with CMA's to ensure reductions are made.

Mr. Tumlin said there is a fundamental problem with CMA's and also with the way most municipalities model and estimate traffic impacts and making decisions about mitigating them. This is also embedded in CEQA in the way it treats transportation analysis. It is complicated and rooted in a focus on intersection Level of Service (LOS) as the primary criterion by which transportation investments are judged. He said intersection LOS measures the seconds of delay that motor vehicles experience at intersections. When a CMA or municipal conducts a traffic impact, it is judged on an A to F letter scale. Many people confuse the A through F system with report cards and assume F is the worst and A is the best. However, from an economists' perspective, LOS F means the roadway investment is fully utilized. From a retailer's perspective, LOS E is much better than LOS A because many cars are traveling relatively slowly and they see inside stores.

The worst part of the problem is the tools by which we are allowed to mitigate a poor LOS score. If by CEQA or CMA analysis, roadway segments are LOS F, there are a couple of options to solve the problem; 1) widen the roadway, 2) reduce the density of development, and 3) to move development to a more isolated/rural location where there is currently not traffic congestion so the new development will not trip the LOS from E to F.

The unintended consequence of each action is for traffic congestion to be a self-fulfilling prophecy. If the roads are widened, it is easier to drive and induced demand is unleashed. Also, a wider road makes it more difficult to walk, bike or take transit. The second solution of reducing density simply increases the vehicle trip generation rate. The third situation is worst of all--By moving development out, it ensures all trips are by cars, and they will be long car trips.

He said the solutions CMA's currently employ to reduce localized traffic congestion greatly exacerbate regional traffic congestion and increases emissions. Therefore, the CMA's and municipalities need to get smarter at measuring the role of the transportation system in achieving larger goals.

MTC has moved in this direction of looking at economy, equity and ecology, but the CMA's have not. There is a role for the District to play in concert with other agencies in helping to reform the charters of the CMA's that have to be approved by MTC and to change the rules of the game. If you tell CMA's that their job is to reduce congestion by reducing vehicle trip generation rate rather than accommodating it, this would completely change how their projects are evaluated and their priorities would be reversed.

The second problem with CMAs is that once a project is adopted into their plan, it becomes a legacy and it can no longer be evaluated based on new criteria. The other thing necessary is for regional agencies to require that the CMAs continue to update their funding priorities based upon the new evaluation criteria. So, just because something has been on the books does not mean it is a good idea.

Mr. Cohen added that MTC is trying to figure out how to take the SB 375 target and push it down to the CMA level. There is no mandate in SB375 that CMAs adopt this goal, but most counties go through a mini, regional transportation plan and most will do updates over the next one to two years. TransForm feels strongly they should adopt the 50% GHG reduction target and try to realign their planning around it and affordability clearly needs to be one.

Finally, Mr. Cohen said the 25-year regional transportation plan is supposed to look at available revenues and determine what projects can be funded. He said the process is loose, and the $25 billion shortfall in federal funding for transit was allowed to exist, and this allows expansions to sit on the books. So getting at that fiscal constraint at the local level is important.

Mr. Lucks thanked speakers, and asked for clarification about the parking cash out subsidy and not having much enforcement. His understanding is that the law changed last year to provide increased authority for air districts. Also, regarding the comment about the myth of paid parking hurts retail he said about one year ago, Oakland increased the time with which one had to pay for parking later in the evening, which brought forth a big backlash. Mr. Tumlin said there is new authority to enforce the parking cash out subsidy but no one has acted on that authority. It is difficult to get information about what are employers who are covered by the law are doing. He noted it is a very small number of employers that may cash out parking, but they estimate that the current state law covers less than 1% of California employers. Therefore, working to expand that coverage in such a way that it makes economic sense for employers to implement is most important.

Regarding parking, Mr. Tumlin said Oakland is the perfect case study of how not to do parking, and he discussed a story about the Grand Lake Theater owner increasing the price of parking and extending the hours of enforcement, while having all meters still take quarters and have a two hour time limit. The City should recognize it is important to make the neighborhood more successful for its customers. Setting a price too low does not work for business. Setting it too high does not work because of empty spaces, but setting it just right is both good for business and maximizes revenue for the City.

Ms. Roggenkamp requested Mr. Tumlin expand on Redwood City or another example in the region that has taken parking head on from a City finance perspective and has worked well, and Mr. Tumlin discussed the downtown Redwood City case study, free City parking and non-availability of parking. They developed an ordinance which said there shall be about 15% of parking available on every block in every lot at all times of day throughout the City and staff is delegated authority within certain constraints of determining what the right price is in order to achieve a parking availability target. The City implemented new technology for meters, reduced the cost of parking in garages, ended time limits and set a right price, all employees went to garages or free parking three blocks away that was not utilized. They took 100% of the net revenue and reinvested it in the downtown, and sales tax revenue increased which went to the General Fund.

Mr. Tumlin then provided another example in San Francisco, which uses parking as a congestion management tool. Data sensors sit under parking spaces in pilot areas that wirelessly network with each other. They let the City and others know where empty parking is and keep close track of utilization patterns. This allows the City to adjust the price of parking by time of day to ensure there are always spaces available, to eliminate driving around and to be able to adjust parking rates to achieve vehicle trip reduction goals.

In response to Mr. Brazil, Dr. Mui described Pavley I and II technologies and their differences. Mr. Brazil questioned costs for residential charging stations. Dr. Mui said options are to plug into a normal 120 outlet, but most customers will want to charge at a higher voltage to charge up faster. Level II charging is developing with service providers providing charging equipment at a cost of about $2,000. Key is making sure infrastructure have load management functions so customers can utilize electricity for the least amount of cost, minimize impacts to the grid, and avoid peak charging.

Dr. Bedsworth said if parking starts to unbundle, she questioned the case of someone not wanting to buy parking with their home. Mr. Tumlin said for a single family home, in terms of government regulation, it does not make sense to force unbundling of parking, but in a neighborhood like Grand Lake in Oakland, where neighbors are living in multi-family housing with no parking, the market price is high. Having the municipality to allow homeowners legally to sell parking to neighbors is appropriate, as well as selling parking on, for example, Craig's List.

Dr Bedsworth asked to integrate electric home charging and the move to sharing community cars, which seems they must occur in a similar timeframe. Dr. Mui said to the extent there is a wider adoption of technology; people will need a place to park and charge the vehicle, which does not necessarily conflict with reducing parking in public spaces. Where it gets more challenging is in multi-dwelling units where owners do not have garages, which is a larger question. Some companies are working with landlords to have a spot available for the community to charge their vehicle not associated with one particular resident. Mr. Tumlin also noted that once the actual costs of driving are shown, cost effective ways of driving while improving mobility include City Car Share and Zip cars work well and reduce VMT's and emissions. He said for every car share, between 7 and 25 private vehicles are eliminated and VMT reduced significantly, even for people who did not previously own a car because fixed costs are turned into variable costs.

Dr. Holtzclaw thanked presenters, and said San Francisco has incentives for new developments to include a certain number of Car Share or Zip car locations, and most developers realize they can decrease the amount of parking and provide incentives, and neighbors want this or sometimes demand it. He referred to Slide 14 on PHEV Fleet Penetration and total electrical consumption, and asked to include the total U.S. emission of CO2 so as to compare the percentage of improvement.

Dr. Mui said in this scenario is an additional 7% of electricity. The EV's are 3 to 4 times more efficient than a gasoline engine. Overall, because of the increase in efficiency, transportation energy demand is

dramatically reduced if an entire fleet is converted, and he doubts it would be over 10% over total additional load. However, he agreed to provide the actual figures to Dr. Holtzclaw.

Dr. Holtzclaw referred to the example of San Francisco's parking and asked if it was done on a day-to-day basis or an hourly basis and questioned how rates are raised. Mr. Tumlin said making the market work requires getting adequate information to the consumer to make a reasonable choice. By the time the consumer has made the decision to drive, it is too late. Therefore, there is limited effectiveness of dramatically increasing or decreasing the price of parking on an hourly basis, but better is relying on analysis of past behavior to make adjustments over time and holding them steady. Another role regional agencies can help with is to make this technology that already exists both out there by releasing transit information it collects.

Dr. Holtzclaw referred to Mr. Tumlin's presentation on page 20 and 21, and regarding changes to reduce carbon emissions and costs per ton of profits or costs. He said he could not find changes in parking and Mr. Tumlin said this is because the transportation sector has been ignored by big studies that have looked at the entire economy and things to reduce CO2 emissions. In particular, the demand side of the equation is continually undervalued.

Vice Chair Blonski thanked speakers, and said the analogy of children is indicated in TransForm's presentation which is important which also brings in considerations of public safety. He referred to slide 27, under the column "reward Innovation/consistency" and questioned CEQA's streamlining and questioned remedies. Mr. Cohen said SB 375 is the first major attempt to overcome some of them.

Vice Chair Blonski referred to the 80% reduction scenarios for light duty vehicles and asked how to deal with population projects. Dr. Mui said population projections are based on the state's Department of Finance forecasts. He said California is at 38 million and is expected to grow to 60 million by 2050. The actual modeling is what ARB uses for vehicle stock turnover and growth. If the growth rate is lowered, it would be tremendous, but also needed is reduction in vehicle ownership and providing more mobility options other than driving.

Mr. Tumlin said in his practice, CEQA is the greatest promoter of sprawl and the biggest obstacle to infill development in California. It occurs in Appendix G of the guidelines which were recently reformed. He said TransForm lost in that reform effort and reform was made worse by the League of California Cities and the California Home Builders. The necessary reform is to drop the LOS and substitute per capita VMT as the significance criterion for transportation and to not allow communities to mitigate their traffic impacts by expanding roadways. This eliminates all obstacles of doing infill development and makes it more difficult to develop sprawl. He said the League of California Cities uses the current guidelines as an exaction tool because cities do not have transportation impact fees. In order to eliminate the League's objection, we need to help all cities impose transportation impact fees and a grant program from the District of about $50,000 that will let cities charge all development for their transportation impacts, and not just those projects that trip an intersection from LOS E to LOS F.

Mr. Cohen added that if one is in a Priority Development Area (PDA) and there is a pre-set traffic mitigation plan for that area, you can only be charged a proportional share of the traffic mitigation fee for that development. Builders support this because they are okay with fees but not okay with the total uncertainty that comes with CEQA. If these can get set up, there is no chance for CEQA exemptions until 2013 when the SCS is adopted, and it is a perfect time for people to develop and implement mitigation plans within PDA's.

Ms. Bard referred to HOT lanes and net revenues going to the current transportation system rather than supporting sprawled development. She said this recommendation was given a year ago, which she read into the record, and she asked if Mr. Cohen had anything to add to this. Mr. Cohen said MTC had hoped

to get legislation that would allow the 800 mile network which failed. They just awarded a contract to develop a network of at least 400 miles. They have decided that because they had too much public involvement, they are going in the opposite direction and want to said the council heard that parking pricing, re-examination of current investments, fiscal constraints, freeing up projects sitting on the books that are not reach goals, and the District is in a perfect place to impose criteria for analysis, and TransForm is trying to convince them to make it more of an open process. He urged the recommendation because there is a separate public/private partnership law where it is MTC and Caltrans as partners and they believe they could do it under existing law and require less participation. Mr. Tumlin added that MTC is modeling for the HOT project including the portions of the program that add highway lanes. Their modeling did not include peak demand nor did it include any increase in housing at the suburban fringe that might result in highway expansion. Their argument was that it is an imprecise science and cannot predict the demand inducement, nor the degree the real estate market will respond with increased under-dependent housing at the suburban fringe. The answer is coming up with a range of estimates. Therefore, the District could push MTC to study what the secondary impacts of what highway expansion might be. He said they also find that there are significant air quality CO2 benefits from tolling existing lanes, which has produced a dramatic shift in travel behavior at a small price differential.

Mr. Brazil questioned speakers' thoughts on current transit funding and suggestions on further shifting funding. Mr. Cohen said they are involved in a few efforts to increase it. From the State level, one would be to index or increase the State gas tax and at the same time, change Article 19 which has strict requirements for transit operations. Second would be to allow regions the authority to raise fees, assuming Proposition 26 does not pass, on fuels and vehicles. Finally, he thinks innovation is needed. The transit sustainability project MTC is doing is looking into the range of mechanisms. He has suggested things like massive expansion of the Eco-Pass Program where both businesses and residents could give out passes bought at great discount because they are at bulk.

Mr. Tumlin added that changing all funding formulas to reward what we are trying to achieve. Currently, funding formulas tend to emphasize transit capital expansion at the edge, which tends to be inefficient projects which are bad for the economy and equity, and to devalue improvements to the core system. He would argue that capital money should be focused overwhelmingly on the thousands of smaller projects that improve existing service and reliability. It should focus on high frequency lines throughout the region. Important to understand is that transit delay is a significant problem for all operators. If they can reduce transit delay by 20%, not only can buses be turned around more quickly and increase capacity by 20%, transit is also then made significantly more attractive to those who have a choice of both.

Mr. Kurucz said when they do the sprawl and develop further out as a solution, looking over 25 years it seems that the I-580 and I-680 corridors were developed out to address whatever congestion problems were at the time, and now, you are trying to figure out how to solve the congestion problem in the new area. Mr. Tumlin said in CEQA, they are required to analyze cumulative demands and they are supposed to look at the larger impacts of what they do. The end result is that not only do we focus on the adjacent intersections, but solutions to solving traffic congestion problems exacerbate. This expands the extent of the problem multiplicatively.

Mr. Kurucz referred to parking and said he used to live in the Grand Lake in Oakland; they have now introduced validated parking where it is seen more in downtown San Francisco. He wondered how this fits into the strategy because it means the business is getting the benefit of the trip is helping pay for it. Mr. Tumlin said validated parking is the opposite of parking cash out—you are subsidizing customers who drive and not providing the same subsidies for customers who do not drive. It is not very efficient from a systems perspective, but he would argue that those are individual businesses making their own decision as to whether this makes sense rather than government providing validated parking for everyone. By getting government out of the business if merchants were made to make the decision, they will

recognize that for their target market, it is worth it for them. He thinks that valet programs provide a higher level of customer service for those customers who want it and are willing to pay for it.

Council Members thanked all presenters.

OTHER BUSINESS

4. Council Member Comments/Other Business

Chairperson Bramlett gave the following report:

- Advisory Council Member Michael Sandler will be giving a presentation to the Board of Directors at their November 3, 2010 Board Meeting;
- Advisory Council Member Form 700 Statement of Economic Interests are due November 2, 2010;
- Advisory Council Member recruitment is underway, as there are expiring terms of Advisory Council Members

5. Time and Place of Next Meeting - 9:00 a.m. – 12:00 p.m., Wednesday, November 10, 2010, 939 Ellis Street, San Francisco, CA 94109.

6. Adjournment: The meeting adjourned at 12:14 p.m.

Lisa Harper
Clerk of the Boards

AGENDA: 2

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Jeffrey Bramlett and
Members of the Advisory Council

From: Jack P. Broadbent, Executive Officer

Date: November 3, 2010

Re: Discussion of Draft Report on the Advisory Council's October 13, 2010 Meeting on California's 2050 GHG Emission Reduction Target of 80% Below 1990 Levels – Strategies and Technologies for the Transportation Sector

The attached draft Report on the October 13, 2010 Advisory Council Meeting on California's 2050 GHG emission reduction target of 80% below 1990 levels – Strategies and Technologies for the Transportation Sector was prepared by Advisory Council members John Holtzclaw, Jenny Bard, Ken Blonski and Debbie Mytels.

The draft report will be discussed and finalized by the Advisory Council at its November 10, 2010 meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Gary Kendall
Reviewed by: Jean Roggenkamp

DRAFT REPORT ON THE OCTOBER 13, 2010 ADVISORY COUNCIL MEETING ON CALIFORNIA'S 2050 GHG EMISSION REDUCTION TARGET OF 80% BELOW 1990 LEVELS – STRATEGIES AND TECHNOLOGIES FOR THE TRANSPORTATION SECTOR FOR DISCUSSION BY THE ADVISORY COUNCIL AT THE NOVEMBER 10, 2010 MEETING

SUMMARY

The following presentations were made at the November 10, 2010 Advisory Council meeting on California's 2050 Greenhouse Gas (GHG) emission reduction target of 80% below 1990 levels – strategies and technologies for the transportation sector:

1. ***Great Communities for Climate Protection*** by Stuart Cohen, co-founder and Executive Director of TransForm, an organization whose mission is to "create world-class public transportation and walkable communities in the Bay Area and beyond." In 2005 Stuart helped conceive and launch the Great Communities Collaborative. This partnership of five non-profits, three community foundations, and 24 community partners is engaging communities around the Bay Area in planning for sustainable, equitable development near transit. He is also the co-founder and chair of ClimatePlan, a statewide network that is promoting smart land use and transportation as critical components of California's climate strategy.

2. ***Regional Parking Strategies for Climate Protection*** by Jeff Tumlin, Principal for Nelson\Nygaard Consulting Associates. Jeff has extensive experience working with cities, developers and regional governments to foster economic development while improving quality of life through smart transportation investments. His expertise covers four key areas: Planning for Urban Infill and New Towns; Transit-Oriented Development; Regional Transit Planning; and Multimodal Planning.

3. ***Achieving California's GHG Emission Reduction Targets: Plug-in Electric Vehicles*** by Simon Mui, a scientist with NRDC's Air & Energy Program. Simon focuses on advocacy and research regarding clean vehicles and fuels, with the goal of reducing the impacts of our transportation system. Before Simon came to NRDC, he worked for the U.S. Environmental Protection Agency in Washington, D.C., where he analyzed and authored studies on plug-in electric vehicles and on climate mitigation strategies for the transportation sector.

DISCUSSION MEETING

The Council discussed how to incorporate and expand upon the recommendations from the May 13, 2009 meeting on California's GHG emission reduction target for the transportation sector.

KEY POINTS

Stuart Cohen

- Kids are an indicator species for climate health, by how much they walk and cycle. Vibrant, convenient communities stimulate walking and biking, and healthy interactions. Single use, sprawling areas, with little transit and poor access (no gridded streets) to services, schools and jobs increase vehicle miles traveled (VMT), congestion and costs. Greenhouse gas emissions are also highest in low density areas.

- Sprawl communities place the greatest burden on low income residents, who must spend a larger portion of their household income on transportation costs. According to *Windfall for All*, a report by TransForm, annual auto costs increase from under $6,000 for families in smart growth areas to over $14,000 in sprawling communities.

- It is widely believed that transportation investments that support walking, cycling and transit are too expensive but this does not take into account the full costs of driving. A full economic analysis of transportation investments that includes all personal costs of driving can show significant savings for individuals and families.

- California's Sustainable Communities and Climate Protection Act (SB375) is a major paradigm shift in planning, requiring Metropolitan Planning Organizations (MPOs) to conduct regional planning to meet CO_2 reduction targets from driving. In the Bay Area, the greenhouse gas (GHG) reduction targets are 7% by 2020 and 15% by 2035. According to the Metropolitan Transportation Commission's (MTC) model, 12% can be achieved by land use, 8% by pricing, and 3 % by transportation demand management (TDM). More can be done with infrastructure and transit efficiency than is shown by MTC's model.

- It is more cost effective to focus transportation investments on improving transit efficiency and improving infrastructure to enhance connectivity for walking, cycling and transit, rather than building freeway lanes that subsidize sprawl. By improving efficiency, for example, Caltrain increased service and ridership by 70% with only a 40% increase in costs.

- In their Regional Transportation Plan, MTC should eliminate grandfathering of transportation projects that increase VMT and should require all projects to be analyzed for effects of induced growth and induced demand, including the proposed expansion of the High-Occupancy Toll (HOT) lane network. Additionally, revenues from HOT lanes should be directed to improve transit rather than building traffic lanes. MTC should also consider changing funding formulas to reward operations and cost effective projects, rather than huge capital projects. MTC could also encourage expanded use of business and residential

passes for public transit – both free and deep discount to encourage ridership while evening out funding streams.

- MTC should continue and expand its successful programs that can have the greatest impact on reducing greenhouse gases while meeting other key economic and social goals, including bicycle and pedestrian buildout, Transportation Climate Initiative, Safe Routes to Schools, a regional parking program, Transit Oriented Development including affordable housing, planning grants, and rewarding innovative ideas.

Steps forward

1. Educate and engage through developing a regional/city vision, and sponsoring walking tours and other engaging educational events for residents and planners.
2. Support bike/pedestrian planning, Safe Routes to School, Livable Communities and community planning grants.
3. Reward innovation, including Priority Development Areas (PDAs), money to implement Transit Oriented Development (TOD), CEQA streamlining for projects that implement the Sustainable Communities Strategy, Green TRIP certification, and indirect source review.
4. Regional fit: reduce the number of transportation projects grandfathered into the sustainable community strategy. Provide local planning resources to ensure zoning is ultimately consistent with regional housing allocations and housing elements.
5. Work with MTC to calculate induced traffic on past projects and include an analysis of induced growth and induced demand of new infrastructure.
6. Ensure pricing is seriously considered as a regional strategy, and use the experience of the recent Bay Bridge toll increase results to predict potential outcomes.

<u>Jeff Tumlin</u>

- Zoning. Household auto ownership depends on density, transit, and household size and income. In auto-oriented sprawl, families spend more on transportation than on housing. The cost of owning and operating each car is equal to $100,000 in a mortgage.

- Parking is the most overregulated commodity in United States. Cities require huge parking lots, at $20,000 per space. Residential parking requirements increase rents by 15-30% per place, and reduce the number of units by 15-25%. Clustering homes, offices, shopping, schools and parks like downtown Palo Alto and Mill Valley reduces land and parking area by over 50 percent, VMT and arterial trips by 75 percent, and arterial turning movements by nearly 100 percent. High city parking requirements and free parking cause excessive parking, lower development and land value, and increase sprawl, vehicle ownership, VMT, congestion, pollution, energy use, and greenhouse gases.

- Parking policy reform can achieve the greatest reductions in VMT, congestion and greenhouse gases at the lowest cost and at the greatest speed. Parking reform can reduce VMT, GHG and energy use 50% in new development and 20-30% in retrofit of existing development. It can also generate revenue ($2000/ton CO_2), is pro-market, pro-smart growth and region-wide, and promotes social equity.

- Key elements of successful implementation of parking reform:
  - Address fear of parking spillover: help the public understand the real costs of "free" parking, and benefits of residential parking permit and parking benefit districts, in partnership with MTC.
  - Charge market rates for parking in high demand areas. Replace minimum with low maximum parking requirements (San Mateo and SF), and increase the floor to area ratio (FAR) to facilitate redeveloping parking lots.
  - Invest in good parking technology; parking meters that only accept quarters should be made illegal. Redwood City's staff adjusts their intelligent parking meter rates to keep 15% of curb spaces/block vacant; and motorists are called before meters expire. SFPark gives rates and availability on-line, and will show transit alternatives.
  - Workplace Parking Cash-Out (PCO) reduces parking requirements and drive-alones. Genentech got higher Floor Areas Ratios (FAR) in exchange for $4/day PCO, worker transit subsidies and a shuttle. The state PCO law should be enforced locally and extended to cover companies with 10-50 employees.

- CEQA reform is needed to cut regional VMT growth, but the League of Cities opposed losing Level of Service (LOS) impact fees, and the homebuilders dislike the uncertainty of regional impact fees.
- Key Actions for Regional Agencies:

  - Start easily, and use regulatory authority to start requiring unbundling of cost of parking and cost of housing which will make housing more affordable for residents with fewer cars.
  - Coordinate local policies, support and fund FOCUS PDAs, harmonize climate/smart growth strategies with parking and TDM.
  - Engage congestion management agencies in parking reform.
  - Include parking reform in grants, train and assist cities, develop Green Parking Certificate, and analyze parking in the sustainable communities strategy. BAAQMD should levy a region wide annual parking impact fee as part of the indirect source rule (ISR), and return revenues to local governments for walk/bike/transit improvements and addressing social equity.
  - MTC should condition funding on parking reform (like Transit Oriented Development), assess city/county/corridor performance and penalties. The three regional agencies (MTC, BAAQMD and ABAG) should fund

parking reform, especially in PDAs, and lobby to eliminate the federal tax subsidy for employee parking.

- Tolling existing lanes: There are significant air quality, congestion and CO2 benefits from tolling existing lanes. The recent congestion pricing at Bay Bridge toll plaza produced dramatic shifts in driving behavior even at a very small price differential. This indicates that expanding to more locations could make a significant impact on peak travel, and help make the case for roadway pricing in other bottleneck locations throughout the region. Pricing of existing lanes has big benefits, for congestion, air quality, CO2. Expanding highways with priced lanes has poor results for air quality and CO2 and traffic congestion.

Dr. Simon Mui

- Thirty seven percent of California's GHG emissions come from transportation, with 27% of the total from light duty vehicles. Even with cleaner vehicles, the upcoming low carbon fuel standard, and reduced driving from SB 375, there will be a huge reduction shortfall by 2030 and 2050, demonstrating the need for electric vehicles (EV: plug-in hybrids, battery electric vehicles and hydrogen (H_2) fuel cell vehicles). Though there are several EVs coming on the market, we need to push forward with next round of regulations to accelerate commercialization of advanced technology vehicles. Early market success will determine how fast we can push, and how far we can push. We need US and CA strategic plans to coordinate and incentivize clean cars and fuels, including refueling (Better Place, etc.) infrastructure.

- Well to wheel analysis shows plug-in hybrids (PHEV) save 1/4 the GHG emissions of mid-sized cars on coal electricity, 1/3 on present US grid, and 1/2 on renewable grid. California can achieve 80% reductions in 2050 with: 111 g CO_2/mi (80 mpg) vehicles, a 25% VMT reduction (32% of business as usual) and a 45% reduction of carbon in fuel.

- The Bay Area Air Quality Management District's efforts have greatly aided the deployment of EVs and infrastructure and should continue partnering with Bay Area EV Corridor for plug-in EVs (PEV) and analyze and promote air quality benefits. BAAQMD and regional agencies could also:
  - Track deployment and charging needs of communities
  - Streamline customer experience: help disseminate best permitting and inspection practices information; environmental and social benefits of city engagement; award local government roles and activities to stimulate the market.
  - Provide public with high exposure to PEVs: car sharing programs, taxis, rentals; vehicle purchases by private employers and cities.
  - Partner with companies: continue working with Silicon Valley Leadership Group (SVLG), BAC and BACC on fleet purchase plans; and tax

incentives for battery R&D, manufacturing of PEV components and charging service providers

- Ensure new residential and commercial buildings are "PEV ready"
- Seek innovative financing of up-front costs of PEVs and charging infrastructure.

EMERGING ISSUES

1. Need to identify what policies and transportation investments will have greatest impact to increase walking, biking and transit use, and the convenience of neighborhoods. Need for more sophisticated transportation and land use models that can analyze public health impacts of various policies and transportation investments on increasing mode share of walking, cycling, and transit.

2. The San Francisco Public Health Department (SFPHD) has developed a methodology for analyzing transportation investments that examines the driving-related health impacts from air pollution, noise, injury and reduced physical activity. The tool looks at road pricing and how revenues could be used to achieve transit improvements, better walking and biking environment and mixed-use infill. This could be a model for MTC to adopt for analyzing and prioritizing transportation investments.

3. Challenge of transit funding and expansion: over the next 25 years we are facing shortfalls of $25 billion in operations and maintenance.

4. Reforming local, regional and state planning to achieve VMT and CO2 reductions: regional planning to reduce GHG will depend on Congestion Management Agencies (CMAs) changing their business as usual approach to approving projects. Need to reconsider committed projects in county and regional transportation plans, as well as fiscal constraints of all projects.

5. California is moving forward with development of strong, statewide, zero emission vehicle (ZEV) mandate to achieve GHG reduction goals. Proposed updates to low emission vehicle (LEV) III, Pavley 2 and ZEV will be released in January.

6. SB 375's mandate to reduce VMT as a per capita metric does not address the challenge of achieving reductions in greenhouse gases. The latest calculations from CARB and MTC indicate that the current per-capita targets will still lead to overall increases in CO2 emissions from passenger cars: http://arb.ca.gov/cc/sb375/mpo.co2.reduction.calc.pdf Aggressive policies to reduce GHG are needed.

RECOMMENDATIONS

The following Advisory Council recommendations to the Board are based on the above presentations, the recommendations made a year ago by the Advisory Council on transportation policies (see attachment on transportation recommendations) and subsequent discussions among Advisory Council members:

1. Work with MTC and ABAG to condition transportation and development investments and grants upon implementation of parking reform. The Air District should also include parking reform policies in the development of an indirect source rule.

2. The Air District should work with MTC to analyze induced demand impacts from MTC's HOT Lane network expansion (study being done right now by MTC consultant Parsons Brinkerhoff) Modeling does not include impacts of induced demand or increase of housing at suburban fringe. A range of impacts should be modeled. Additionally, the Air District should request that net revenues from HOT lanes be used for expanded transit and transit choices, rather than expansion of highway system.

3. The Air District should work with MTC to consider adoption of the SFPHD road pricing model as a way to evaluate all transportation decisions and show the clear public health impacts of various policies. The Air District should also encourage MTC to conduct a performance based analysis of transportation projects to ensure investments are cost effective.

4. The air district should develop a social marketing campaign to increase walking, cycling and transit based on latest research of proven strategies that affect behavior change, including compare with neighbor policies.

5. Seek state legislation requiring CMAs to change their mission statement from primarily "congestion management" to primarily "greenhouse gas reduction" to enable them to focus on increasing mode share of walking, biking and transit, and reducing VMT rather than managing congestion.

6. Develop toolkit for planners, local agencies and CMAs of land use and transportation policies that have the greatest public health, air quality and greenhouse gas reduction benefits.

7. Use MTC's SB 375 implementation planning funds for local community planning processes.

8. The Air District should support development of strong statewide ZEV mandate to help state reach aggressive GHG reduction goals

9. The air district should coordinate regional efforts to accelerate EV charging infrastructure and streamline residential charging station installation and permitting.

10. The Air District should recommend expanding toll pricing to other bridges in the region. Revenues raised should be used to improve public transit service in those corridors.

11. The Air District should develop and promote policies and programs, including securing any necessary legislative authority, to achieve significant reductions in employer-related vehicle miles traveled, including mandating employer transportation demand management plans such as have been adopted by Oakland (GreenTRIP) and San Francisco.

12. The District should support the establishment of a VMT fee or a gasoline tax in the Bay Area to achieve GHG and criteria pollutant and air toxics reductions goals.

ATTACHMENT

AGENDA: 9

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer / APCO

Date: September 30, 2009

Re: Report and Recommendations of the Advisory Council from the May 13, 2009 Meeting on California's 2050 GHG Emission Reduction Target – Transportation Sector

RECOMMENDED ACTION:

Receive and File

DISCUSSION

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

2. ***Vehicle Technology & Travel Reduction*** by Dan Sperling, Professor of Civil Engineering and Environmental Science and Policy, ITS – U C Davis Automotive Related Member of the California Air Resources Board

3. ***Land Use, Public Transit & Trip Reduction*** by Tom Radulovich, BART Director – San Francisco, Executive Director, Livable City

4. ***Goods Movement*** by John Boesel, President & CEO, CALSTART

BACKGROUND

The Advisory Council voted at its July 8, 2009 meeting to have two meetings to discuss the presentations and materials received at the May 13, 2009 meeting on California's 2050 GHG emission reduction target for the transportation sector and prepare a report for the Air District Board of Directors. The two meetings were the originally scheduled July 8, 2009 meeting and a second meeting held on September 9, 2009.

Advisory Council members Stan Hayes, Emily Drennen, John Holtzclaw and Kraig Kurucz prepared a draft report for the May 13th meeting on California's 2050 GHG emission reduction target for the transportation sector, and thereafter, discussed and revised the draft report at the July 8, 2009 Advisory Council meeting. At the September 9, 2009 meeting, the Advisory Council discussed the revised draft report and finalized their recommendations. The completed

final report will be presented for consideration at the Board of Directors October 7, 2009 meeting.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS:

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer / APCO

FINAL REPORT ON THE MAY 13, 2009 ADVISORY COUNCIL MEETING ON CALIFORNIA'S 2050 GHG EMISSION REDUCTION TARGET – TRANSPORTATION SECTOR

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 BA from Georgetown University and his MA 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 Turnkpike 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. 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

The Advisory Council held a meeting on July 8, 2009 to discuss the presentations on May 13, 2009 and a draft of this report. Minutes of the July 8th discussion meeting are attached.

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*) and the Governor's Executive Order S-3-05 (establishing greenhouse gas reduction targets for California), widespread and major reductions in statewide emissions of greenhouse gases (GHG) will be required. As shown in the table below, 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. The Governor's Executive Order S-3-05 set a further target of 80% below 1990 levels (85 MMT) by 2050. As shown in the table, to achieve those goals, GHG emissions in 2020 will have to be reduced by 170 MMT below 2020 business-as-usual (BAU) levels and by another 340 MMT by 2050. 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). This means a 9% reduction from 2004 levels by 2020 and an 82% reduction by 2050.

Year	GHG Emissions (MMT)	GHG Reduction from 2020 BAU (MMT)	% Reduction from 2004
1990	425		
2004	469		
2020 – BAU	595		
2020 - AB32	425	170	-9%
2050 - 80% Below 1990	85	510	-82%

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 state's 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. A large GHG "gap" exists between currently identified measures and California's 2050 target. While hypothetical scenarios have been developed to examine what will be required to achieve California's target of an 80% GHG reduction below 1990 levels 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).

4. Transportation will have to be transformed. There is no clear, simple, and obvious path to achieve California's 80% GHG reduction target by 2050. 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 new fuels will be is still unclear. All new 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) is 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 about two and a half percent of the VMT in the U.S. (although a higher percentage of trips). Expanded traveler choice is critical, with

more walkable neighborhoods, expanded conventional transit, and new mobility options that include dynamic ridesharing, smart paratransit, carsharing and Neighborhood Electric Vehicles (NEVs). Passage of SB375 is a step in the right direction.

5. 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 by such measures as low-emission requirements at ports, eco-driving, and tire inflation.

6. Mobility (VMT reduction) is the "stool leg" most amenable to local control. Important means available to local governments to reduce VMT include:

    a. Land use planning, including general plans and zoning requirements (e.g., where appropriate, allowing and encouraging the siting of markets and restaurants in residential areas, expansion of sidewalks, expanded use of traffic calming measures, reduction in local planning code parking requirements for new developments, modification of setback requirements, and relaxation of in-law unit prohibitions).

    b. Implementation of SB375, which requires that ARB set regional targets for the purpose of reducing GHG emissions from automobiles and light-duty trucks by 2020 and 2035 and that requires that 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. Because the current ability of local transportation planning to effect significant additional reductions is limited, further GHG reductions from the transportation sector sufficient to reach California's 2050 GHG reduction target will require

strong, new, and innovative policy tools, breakthrough technological advances, major changes in public attitudes and behavior, and large increases in funding. The Metropolitan Transportation Commission's Transportation 2035 (T2035) Plan includes a number of 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.

As shown in the table below, with respect to GHG emissions, MTC projects that ARB actions and implementation of the T2035 Plan will reduce CO_2 emissions from the transportation sector in the Bay Area by 35% over business-as-usual 2035 levels, compared with a 2035 objective of 57%. Almost all of these reductions (34%) are projected to result from measures adopted by ARB.

Year	Transportation CO_2 (1,000 TPD)	Relative to 2005	Relative to 2035 BAU	Reduction from 2035 ARB
2005	90			
2035 BAU	116	29%		
2035 ARB	77	-14%	-34%	
2035 ARB + T2035	75	-17%	-35%	-3%
2035 ARB + T2035 + Land Use + Pricing	67	-26%	-42%	-13%
2035 Objective	50	-44%	-57%	-35%

Limited additional GHG reductions are projected to result from additional, 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 that include the following:

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. MTC projects that, by 2035, the Bay Area will 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 by MTC 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.

MTC calculates that measures in the T2035 Plan will achieve a small additional reduction of about 1% in GHG emissions beyond ARB-adopted measures by 2035. Even with the most aggressive combination of additional local land use and pricing policy options from among those considered, MTC calculates that an additional reduction of only 10% would be achieved, still short of its 2035 objective.

There are no "silver bullets" available to address this shortfall. Because the current ability of local transportation planning to effect significant additional reductions is limited, further GHG reductions from the transportation sector sufficient to reach California's 2050 GHG reduction target will require strong new and innovative policy tools, breakthrough technological advances, major changes in public attitudes and behavior, and large increases in funding.

8. Further GHG reductions could be achieved through transit and public planning measures that further reduce VMT. Additional VMT reductions might be accomplished in a number of ways, including further expanded access to transit, further expansion and improvements in transit systems, further implementation of sustainable urban planning measures (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.

9. Major needs and opportunities for the Air District exist. Although significant, breakthrough technological advancements are needed, major changes in public attitude and behavior related to mobility and transit are also needed to achieve California's 2050 GHG target. While posing major challenges, this also presents major opportunities for the District:

    a. 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 the proactive steps that can be taken to reduce our carbon footprints.

    b. 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.

c. The District has an important role to play in working with the ARB in setting Bay Area regional GHG reduction targets under SB375 and in other aspects of its implementation.

EMERGING ISSUES

- Multi-pollutant planning that further integrates consideration of criteria pollutants, air toxics, and GHGs in the development and implementation of air quality plans.

- Large "gap" between currently available measures and what will be needed to meet California's GHG reduction target of 80% below 1990 levels by 2050.

- Need for, and the development of, measures to accomplish a major transformation of the transportation sector, including breakthrough technology advances and policy innovations to reduce the sector's carbon footprint.

- Interactions between air quality and climate protection measures, both synergistic and antagonistic.

- Setting of SB375 regional GHG targets for the Bay Area and the District's role in SB375 implementation.

- District's role in, and best techniques for, increasing public awareness and concern about air quality and climate protection.

- Need for, and possible mechanisms to achieve, significant and long-term increases in transportation funding, recognizing the large technology and funding gaps that currently exist.

- Exploration of the role of innovative incentive policies (e.g., pricing) to reduce GHG emissions.

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.

For the Bay Area to reach California's 2050 GHG reduction target, the District, MTC, and other responsible agencies will need to significantly expand multi-agency efforts to accomplish reductions in regional VMT. This will require additional strong and innovative policy tools, significantly expanded funding, major changes in public attitudes and behavior, and use of a broad range of expanded policy measures (e.g., significant expansion of high-occupancy networks, innovative pricing and toll incentives, and major expansion in and increase in the diversity of public transit and related options).

The District has taken an important and widely recognized leadership role in climate protection, and we strongly support those efforts and encourage the District to continue and expand them, as follows:

1. 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 action plans by cities and counties that include emission inventories

    c. Development and implementation of climate protection provisions in CEQA guidance

    d. Development and distribution of a model climate protection element for community general plans

    e. Development and distribution of model provisions for community climate action plans

    f. 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

    g. Establishment of a climate-related Spare-the-Air-Everyday outreach program.

2. The District should implement an integrated multi-pollutant planning strategy that considers criteria pollutants, air toxics, and GHGs in the development of all air quality management plans.

3. The District should play a major role in the implementation of SB375, including the following:

    a. Working closely with ARB in the setting of Bay Area GHG reduction targets

    b. Supporting ambitious regional GHG reduction targets through the Joint Policy Committee to ensure a departure from "business as usual" approach to planning

c. Identifying and describing 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

d. Providing technical support in the apportionment of regional GHG reduction targets among cities and other entities

e. Identifying and comparing alternative GHG mitigation strategies and measures for attaining SB375 targets

f. Exploring and developing policies and programs, including securing necessary legislative authority, to expeditiously achieve significant reduction in employer-related vehicle miles traveled, including employer-developed transportation demand management plans

g. Creating evaluation or accountability standards once GHG targets are adopted.

4. The District should continue to focus its attention and resources on the differential impact of air pollution on vulnerable populations and on most heavily impacted communities. In addressing GHG reductions, the District should continue this focus by evaluating the financial and quality of life impacts of its policies and activities on these vulnerable populations.

5. The District should support such measures as pay as you go insurance or the establishment of a VMT fee or a gasoline tax in the Bay Area to achieve GHG and criteria pollutant and air toxics reductions goals.

6. The District should continue its efforts to integrate air quality and climate protection goals into its evaluation and funding of grant applications. The District should also support the statewide merging of funding pools for air quality and climate protection grant programs.

7. 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 future regional transportation plan's Sustainable Communities provisions. It should also continue working with CARB, Caltrans, California Energy Commission, and other state agencies in the development of GHG and criteria pollutant reduction strategies.

8. The District should encourage the Joint Policy Committee and MTC to develop specific and empirically justified HOT lane policies regarding induced VMT, air quality impacts, construction, and operating costs, use of toll monies for system expansion versus transit, and equity issues.

9. The District should prepare a biennial report of Bay Area cities and counties on the basis of criteria, such as:

a. Improvements in residential per capita GHG emissions and commercial/industrial per employee GHG emissions

b. Enactment and implementation of planning policies and measures to reduce GHG emissions.

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

APPROVED MINUTES

Advisory Council Regular Meeting
9:00 a.m., Wednesday, July 8, 2009

CALL TO ORDER

Opening Comment: Chairperson Brazil called the meeting to order at 9:08 a.m.

Roll Call: Chairperson Harold Brazil; Vice Chairperson Jeffrey Bramlett; Secretary Ken Blonski; Council Members, Jennifer Bard, Louise Wells Bedsworth, Ph.D., Benjamin Bolles, Emily Drennen, MPA, Stan Hayes, John Holtzclaw, Ph.D., Robert Huang, Ph.D., Kraig Kurucz, M.S., Sara Martin-Anderson, M.P.P., Kendal Oku, Neal Osborne, Jonathan Ruel, Dorothy Vura-Weis, M.D., M.P.H.

Absent: Robert Bornstein, Ph.D., Rosanna Lerma, Karen Licavoli-Farnkopf, Jane Martin, Dr.P.H.

Deputy APCO Jean Roggenkamp introduced the Air District's new Manager of Executive Operations, Jennifer Chicconi. Advisory Council member Jennifer Bard introduced Sharlene Kraner, an Oakland High School Junior currently interning with the Lung Association.

Public Comment Period: There were no public comments.

Consent Calendar:

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

Ms. Bard requested minor amendments to the minutes, as follows:

- Page 2, under Highlights of Presentation, delete the words, "…in 2002".
- Page 2, third bullet, replace "AB 375" with "SB 375".

Council Action: Member Holtzclaw made a motion to approve the minutes of May 13, 2009, as amended; Member Drennen seconded the motion; unanimously carried without objection.

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.

Chairperson Brazil thanked the subcommittee of Advisory Council members who prepared the draft report; Stan Hayes, John Holtzclaw and Emily Drennen.

Mr. Hayes distributed a handout on "Emerging Issues" for the draft report, and Ms. Drennen distributed a document entitled, "Other transportation-related recommendations."

Advisory Council members recognized the work of the Subcommittee and provided the following comments and suggestions regarding the Draft Report:

Council Member Discussion/Comments:

Key Point: #1:
Dr. Vura-Weis questioned areas in the report where numbers of percentage reductions and different years they relate to is referenced, which she believed was confusing. She suggested adding to the end of the sentence: "This means a 9% reduction from 2004 levels by 2020 and an 82% reduction by 2050."

Mr. Ruel supported the "business-as-usual" comment in Key Point #1, and he and Dr. Bedsworth both suggested a table be used for different years, tons and percentages for 1990, 2004, 2050, what it would measure, what business-as-usual would be, and what the target is. Members agreed with adding a graph and interpretive language to reference the graph under Key Point #1. Dr. Bedsworth agreed to provide an Excel chart for the Final Report showing business-as-usual, reductions and percentages relative to certain points in time, which shows a dramatic need to reduce.

Key Points #2 - #6:
Mr. Hayes discussed Key Points #2 and #3, stating that in order to achieve the 80% reduction envisioned in AB 32 and there must be a major transformation of the transportation sector, transforming fuels, vehicles, and dramatic changes in technology and mobility. While there have been vehicle fuel efficiencies, there has been no corresponding reduction in miles per gallon performance of vehicles.

Mr. Hayes reviewed Key Points # 4 and #5, stating he was struck at how daunting the GHG gap was between currently identified measures in the 2050 target.

Regarding Key Point #6, Mr. Hayes thinks it is the mobility as the "stool leg" that is most amenable to local control, and local governments can affect this process. He then provided a brief explanation regarding Key Point #6 a, b, c, and d.

Vice Chairperson Bramlett referred to Key Points #1 through #6, stating there are a lot of tools and things we can do already, but they are insufficient in our everyday approach and suggested adding stronger language. In comparing Key Point #1 to #2, he asked that percentages be checked. Members agreed to do so once the Excel chart is added.

Mr. Ruel referred to the gap between current measures and the 2050 target and suggested taking Key Point #5 and move it up to be Key Points # 1 or #2.

Key Point #7:
Mr. Hayes said Key Point #7 talks about the local transportation planning's effect on GHG reductions from the transportation sector, which was difficult to write. He questioned whether or not to initially include Steve Heminger's slide on the affect of various local policy options on GHG reductions by 2035. Sobering was the amount of GHG emission reduction from the transportation sector in the Bay Area which is virtually all due to measures adopted by the ARB. He believed that the amount of affect that variations have in local policy is limited, which is also an important message which should be conveyed to the Board of Directors. The Advisory Council heard about what MTC's T2035 plan envisions and there are a number of reasons why it is there is such a large funding gap between what we would like to do and what we are able to do which are outlined as Key Points #7 a, b, and c.

Mr. Hayes noted that Mr. Heminger indicated it is also more maintenance and repair of the existing transportation systems than it is about construction of new freeways that represent the largest expenditure of funds.

Dr. Vura-Weis referred to Key Point #7 b and mention of an expectation of tripling of freight volumes by 2035, and she asked for an explanation to be provided. Mr. Hayes noted this was from the MTC presentation, but it could be removed. Kraig Kurucz said the comment seemed to be tied in the local population growth section, and Mr. Hayes agreed to follow-up on the reference.

Dr. Vura-Weis said Key Point #9 is important and covers two different opportunities for the Air District: 1) public education and helping to change public attitudes; and 2) providing guidance to cities on how they

make plans. She questioned whether there would be a way to separate those as two separate points. Mr. Hayes said the Recommendations section spells out what those mean and it dove tails the Recommendations back to this section. He noted that the guidance portion is contained in Recommendation #2.

Dr. Vura-Weis suggested changing the title of the Key Point #9 to, "Major needs and opportunities for the Air District exist in public education and assistance to cities" so it is clear what is contained in the section. Mr. Hayes said he did not want to limit it and noted that those opportunities would be identified and addressed in the Recommendations section.

Ms. Drennen suggested splitting the paragraph into two to make those points stick out more. Mr. Hayes suggested completing Key Point #9's paragraph at: "While posing major challenges, this also presents major opportunities for the District. Then, make the next point out as "a", start "b" with "There is a need for continued District assistance and guidance,".

Key Point #8:
Mr. Hayes said further improvements in mobility (and resulting reductions in VMT) are possible, and he discussed examples of good urban planning, more walkable communities, compact development, TOD and parking reforms.

Mr. Bramlett said Key Point #8's title suggests that improvements in mobility will result in reductions in VMT but someone with another set of values may not agree with this. He suggested saying we are looking for reductions in VMT from that change in mobility and not what we expect the result to be, because it may not. Similarly, in the last sentence, Mr. Bramlett asked to list the actual concepts or programs rather than the locality, i.e., (such as those in San Francisco).

Key Point #9:
Mr. Hayes said there appears to be major needs and opportunities for the Air District and the subcommittee tried to summarize what they heard from the speakers about the things that the District can do. Primarily, they involve the District's role in climate protection, co-benefits between GHG reduction and air quality improvement, need for assistance and guidance of technical areas in support of climate protection efforts, like GHG inventories and integration and guidance of SB 375 implementation.

Dr. Bedsworth said AB 32 does not contain the 2050 goal but rather the 2020 goal. She said the 2050 goal is in the Executive Order and there are several areas that refer to AB32's 2050 goal which should be changed because it is not codified into law. She believed the freight volumes question relates to goods movement, the Port of Oakland and population growth, and this is the reason for the increase.

Dr. Bedsworth also referred to Key Point #7; MTC plan showing "limited effect from the transportation sector" and she cautioned the Council about being too pessimistic about it in presenting it. There needs to be fundamental and planning paradigm changes, and she suggested talking about current constraints, but would hesitate in being too pessimistic about the role that transportation planning can play.

Mr. Hayes agreed and said he did not want to discourage action by saying the target is impossible; there was some sensitivity analysis that looked at different levels of policy changes which were pretty aggressive, but it did not seem to move the graph line in the chart presented too much. He felt the Board of Directors should understand there is a lot to be done, but additional local land use policies are not the "silver bullet" and will not change the fundamental slope of the graph line.

Chairperson Brazil believed significant movement in the graph line and a pricing scenario policy was needed, which should be the type of message that should go to the Board of Directors.

Dr. Bedsworth said there are no "silver bullets" that are going to address transportation; all three pieces are needed and she asked not to downplay the results (or graph lines) of the T2035 objective.

Dr. Huang referred to page 5 of the PowerPoint slide from Mr. Heminger's presentation regarding telecommuting, which was not reflected in the Draft Report. It indicates telecommuting needs to go from 3% to 10% market share, as well as other parking strategies like parking cash-out. He suggested including this in the summary or in the recommendations. He shared sentiments about not doing enough and questioned if anyone read Thomas Friedman's book, "Hot, Flat and Crowded: Why We Need a Green Revolution--and How It Can Renew America." The author discusses examples of why Europe was able to reduce gas consumption through increasing the gasoline tax and utilizing funds into other areas. He questioned whether MTC or the Air District could do something like this and wanted to express this as a possibility.

Ms. Drennen said she recently heard Enrique Peñalosa Londoño speak, who is a Columbian politician and former Mayor of Bogota. In three years he was able to tax gasoline and prioritize infrastructure investment for people over cars. She believed there is a possibility to make fundamental changes and it takes a lot of political will.

Mr. Blonski referred to Key Point #7 b and the statement of a population of 2 million or more people, 1.8 million new jobs, and the need for 700,000 new homes. He thinks the District should encourage carrying capacity and the amount of growth as a direct effect on infrastructure and how much infrastructure is needed. He said it seems this is an important variable in all materials being looked at. Statistically, it would be interesting to see what would need to take place at varying population increases and the cost of those increases.

Mr. Blonski also asked to clarify in comments that transportation is reflected in the context with the whole number. Because of the references to so many numbers, he found it difficult to look at transportation just in context of all other sources of GHGs. Regarding land use planning, as long as local jurisdictions are able to receive income from land use and unless some policies are looked at, it will be difficult to change lifestyles and bring about change.

Chairperson Brazil referred to Key Point #7 b and noted that MTC has access to updated socio-economic data from ABAG. The numbers presented are already outdated; Projections was based on pre-recession information and they are now seeing numbers much lower.

Mr. Hayes thinks there is always a balance in the Key Points section to state what the speaker said and not to imply that the subcommittee has necessarily evaluated information themselves. He suggested replacing wording in Key Point #7 b to indicate that "MTC projects that the Bay Area will have …"

Dr. Vura Weis suggested including a comment that, even though growth does not continue at these predicted rates, we still need to address the issues with the same energy and creativity as if they were to continue at predicted rates.

Dr. Holtzclaw referred to Mayor Peñalosa's talk, noting that he was not only the Mayor of a third world city, but a very poor one. He faced opposition about changing the auto and road use, as the land is divided up into private spaces and streets, which are controlled by those who have cars, and biking is fairly dangerous. The public spaces are sidewalks and parks. Cars used to park in public spaces all the time. The Mayor incrementally took streets, widened sidewalks, increased gas taxes on cars, took away parking, and Dr. Holtzclaw believed that this is the kind of planning transformation needed. While it will be hard to inspire, this is the task—for elected officials and the public to see there is another way of doing it, and agreed to draft a report on Mayor Penalosa's talk to be used as a footnote.

Mr. Kurucz referred to Key Point #3 and said in the "three-legged stool" comment about transforming fuels, vehicles and VMT, it seems like the efficiency of present vehicles is short-term but probably overwhelmed in the long-term by the change to entirely new fuels. He questioned how speakers inter-related their comments about vehicles versus fuels in the long term and thinks people might be willing to change VMT if they have a cleaner car.

Mr. Hayes said they all inter-react, particularly the vehicle and their fuel systems. He liked the "three-legged stool" analogy because it was easy to remember, it made sense to pass this along to the Board, but questioned the characterizations of "easiest", hard and hardest, as he was not sure if this gave the wrong impression to the reader.

Dr. Bedsworth referred to Key Point #7 and suggested an amendment to the first sentence: "The current ability of local transportation planning to effect additional GHG reductions…" She suggested adding a colon after the word "factors" at the end of the paragraph; "This is due to a variety of factors: (and list out a, b, and c as stated)." Mr. Hayes questioned if this would imply that it is the current ability of planners to deal with the issue, or are there constraints they are stuck with. Dr. Bedsworth believed that a, b and c are the constraints and not the ability or willingness of people. She thinks that the fact that 81% of our money must go to maintaining or operating the current system seems like a hard constraint to vastly improve the efficiency of public transit.

Ms. Drennen believed some percent of MTC 2035 funding is open for negotiation, but noted there is a large portion that was voter-approved and can only be used for specific purposes. She suggested adding this statement as point "d".

Ms. Bard suggested rewording the beginning of Key Point #7 to a positive rather than a negative in order to present the case for what needs to be done on scales, speed and scope to reach very aggressive GHG targets, and suggested starting the point: "MTC should develop a strong sustainable communities strategy containing all necessary policies on the scale, speed and scope required to reach our GHG goals." She said this will capture more of the urgency and need to do far more of what we are doing, as well as recognize constraints that follow afterwards.

Mr. Ruel suggested the second sentence indicate: "The *current* ability of local transportation planning to effect additional GHG reductions from the transportation sector beyond those resulting from ARB-adopted measures will require a strong sustainable strategy containing all of these necessary policies beyond what is required in SB 375."

Ms. Bard referred to Key Point #9 and asked to see recognition of the Air District's role in advocating and working with local governments to set a strong regional GHG reduction target to help drive local policies. She noted that AB 32 has a 5 million metric ton reduction for transportation, which was based on one study. However, Growing Cooler indicates reductions of up to 11-14 million metric tons as being possible. Therefore, she asked for the Air District's role to support a much stronger target for reducing GHGs through the JPC and in working with local governments and asked to add "c". The subcommittee supported adding item c, and to wordsmith final language:

"c. There is research to support much higher GHG reduction targets and reductions are possible (11-14 million metric tons). The Air District supports the strongest regional GHG targets to support local policies to be successful in reaching our GHG goals."

Ms. Roggenkamp agreed there are dramatic things that will need to happen in order to make a difference in GHG reductions. The JPC is working jointly to help agencies who have the primary responsibility for implementing SB 375. However, no one knows what SB 375 will take to implement in terms of setting targets and getting regional agencies to work together. So, saying things like "we should go beyond what is or will require" is pushing too far what is not known yet. She said the District will participate in the SB 375 process and will be working with partners, cities and counties.

Mr. Hayes said the ARB is supposed to set the regional targets and he was not sure what the District's role is. Ms. Bard said regional stakeholders will have input into those target in a year-long process through the Regional Target Advisory Committee to identify methodologies to establish what the targets will be. The Air District, through the JPC, local governments and the public, can request the strongest possible reduction targets to be successful, which she also thought would help drive policy, as well.

Ms. Roggenkamp added that SB 375 even includes within it a possibility for regions to suggest targets for ARB, which may be stronger than what ARB may arrive at.

Mr. Hayes then discussed the outlined provided to Council members and staff on Emerging Issues, and asked for feedback.

Ms. Martin suggested moving up the third bullet regarding "multi-pollutant planning" to be the first bullet. Dr. Holtzclaw suggested amending the last bullet point, changing "educating" to "informing". Mr. Kurucz questioned if the technology gap in development and adoption of the new technologies in vehicles would qualify as an emerging issue, and Ms. Drennen pointed out that this was included in the second bullet point.

Ms. Bard suggested there be a bullet which recognizes the need for regional planning. The Council briefly discussed the funding gap and the planning process, and members agreed to add the following bullet:

"Need for a regional planning and funding revolution, recognizing a large technology and funding gap"

Ms. Drennen asked to add a bullet regarding parking and the transportation pricing schemes as emerging issues, as follows:

"**Exploration on the role of pricing policies to reduce GHG emissions"**

Chairperson Brazil suggested there be recognition that a funding revolution is needed, as there are shortfalls in transportation.

Mr. Bolles suggested adding the following bullet:

"**Prioritize investment in people over cars"**

Mr. Blonski referred to Emerging Issues and requested replacing the previous suggestion made by Dr. Holtzclaw (6th bullet) of "informing" the public about air quality and climate protection, stating the next three bullets are different strategies about changing behavior. He believed it was one thing to inform the public but something else to get them to change their behavior. He suggested increasing the public's knowledge, believing the District would want to weigh in on strategies to consider changing those behaviors.

Dr. Vura-Weis suggested not only increasing public knowledge/awareness but also motivation, and she asked to change the 6th bullet under Emerging Issues to:

"**District's role in and best techniques for increasing public awareness and concern about air quality and climate protection"**

Dr. Holtzclaw and Ms. Drennen suggested that a "d" be added under #3 in Key Points to convey the idea that what seems impossible can become a reality in moving forward, recognizing the discussion regarding Mayor Peñalosa.

Mr. Bramlett suggested moving onto a discussion regarding Recommendations. While he likes the message he heard, he was somewhat uncomfortable including things only a few members have worked on when there is a process that establishes a record.

Council members discussed and agreed to the following amendments to emerging issues:

<u>EMERGING ISSUES:</u>

- Multi-pollutant planning that integrates criteria pollutants, air toxics, and GHGs in development and implementation of air quality plans.

- Large "gap" between currently available measures and what will be needed to meet AB 32's 80% reduction target by 2050.

- Major transformation of transportation sector, including technology innovations to reduce carbon footprint.

- Interactions between air quality and climate protection measures, both synergistic and antagonistic.

- District's role in implementation of SB 375 regional GHG targets.

- District's role in and best techniques for increasing public awareness and concern about air quality and climate protection.

- Need for a regional planning and funding revolution, recognizing a large technology and funding gap.

- Exploration on the role of pricing policies to reduce GHG emissions.

- Prioritize investment in people over cars.

Regarding recommendations, Mr. Hayes said he thinks the compiled list is specific as to what the District can legally do within its authority in the near-term, and there are some recommendations that are longer term. He then briefly restated the draft Recommendations into the record.

Ms. Drennen noted that the recommendations were mostly formed from the work of the Council's Air Quality Planning Committee. She and Dr. Holtzclaw believe that creating a HOT network will increase VMT and not decrease VMT, HOT lanes are a huge part of MTC's 2035 plan, and a significant percent of money is going into this network.

Chairperson Brazil noted that MTC's vision analysis was the precursor to the full RTP which was done, and it was done to develop scenarios to inform the MTC Commission to put the plan together. HOT lanes was one separate scenario, as well as land use policy changes, land use and pricing, but these could not be used as an actual project RTP, but they could with the investment strategies.

Mr. Hayes said he was not sure if Key Point #7 was within the District's purview and Advisory Council Members recommended rewording #7 to make it more general, or leave it as is. Ms. Roggenkamp discussed previous Advisory Council recommendations such as the smog check program, noting that the Board has a Legislative Committee that weighs in on legislative matters. In this case; however, the Air District works all the time with MTC. The JPC is also the regional coordinating agency, and coordinating functions of land use, transportation and air quality issues are discussed. She noted the District is updating its Clean Air Plan, and the Advisory Council could suggest that the District consider how things might be incorporated into transportation-related measures in the Clean Air Plan.

Mr. Kendall asked that Key Point #7 be reworded and Mr. Hayes agreed the recommendation be made more general after the first sentence of #7, stating the basic question is how to reduce regional VMT which needs more study. He also did not believe the Council could complete the Report at this meeting and suggested a second meeting be held.

Ms. Bard questioned if there could be a recommendation that MTC go back and relook at the allocation of funding and where projects can be reallocated. Ms. Roggenkamp noted this will not occur until another RTP is done four years from now, and Council Members acknowledged this process was now starting.

Ms. Bard then described her work with Sonoma County in reallocating certain projects for more pedestrian and bicycle projects. She asked that consideration for reallocation of projects be considered, if appropriate, in the RTP process.

Ms. Martin referred to Recommendation #3 and suggested adding accountability standards in terms of SB 375. Council Members supported the suggestion, and Mr. Hayes asked to check and ensure it was not identical or included within Recommendation #8:

"d. Creating evaluation or accountability standards once GHG targets are adopted."

Ms. Roggenkamp suggested concluding the regular meeting so the subcommittee could meet. Council members all agreed that another meeting was needed to finalize the Report.

ACTION
Potential Change in Advisory Council Meetings Schedule

Advisory Council Action: Mr. Hayes made a motion to schedule an Advisory Council discussion meeting on September 9, 2009; Dr. Vura-Weis seconded the motion, which carried unanimously.

Council members discussed the subcommittee's efforts and follow-up to the Final Report. Mr. Kendall suggested the subcommittee meet after the regular Advisory Council meeting to discuss the draft Report. Mr. Bunger clarified that per Brown Act requirements, up to 10 members would be able to meet as a subgroup.

Mr. Kendall recognized the complexity of topics and follow-up discussions. He said the Advisory Council will probably have 3 topic meetings this year, and the Air District may need to amend its Administrative Code slightly to limit the topic meetings to no more than 4 per year.

AIR DISTRICT OVERVIEW
Report of the Executive Officer/APCO

On behalf of Mr. Broadbent, Ms. Roggenkamp discussed the PowerPoint presentation which staff provided to the Board of Directors' Executive Committee meeting in May regarding the role and process of the Advisory Council. Discussed were types of recommendations that the Advisory Council had made based upon the first topic meeting, and staff are currently working on those recommendations and moving them into work programs.

She reported on the Summertime Spare the Air season, stating there have been 7 Spare the Air Alerts to date, 5 days each of exceedances of the federal and state 8-hour standard, and 4 days of exceedances of the state 1-hour standard. Spare the Air Everday's particular focus is on carpooling, with the tagline of "Any Ride is Worth Sharing."

Ms. Roggenkamp reported on the District's new website design, said the Board of Directors adopted its budget in June and it may need amendment depending upon the State's budget adoption. The District also hopes to have a Health Officer on board in another month or two.

OTHER BUSINESS
Council Member Comments/Other Business

Chairperson Brazil questioned and confirmed with Ms. Roggenkamp there has been no specific direction from the U.S. EPA on lowering the federal standard. The Air District assumes it will be a non-attainment area for the PM2.5 standard; however, the designations have not yet been officially finalized by U.S. EPA.

Mr. Hayes thanked Gary Kendall and Jean Roggenkamp for their work with keeping him and the subcommittee on track.

Ms. Bard reported that the EPA is revising the NO_x standard, they are looking at near roadway levels, and she questioned what effect this would have. Mr. Kendall said staff is aware of this; there are a certain number of monitors required based on population, and the District will need to review those areas which are close to high traffic roadways.

Chairperson Brazil, Ms. Bard and Mr. Osborne reported on their attendance to the A&WMA Conference in Detroit, Michigan June 16-19, 2009.

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

Adjournment: The meeting adjourned at 11:35 a.m.

/s/ Lisa Harper
Lisa Harper
Clerk of the Boards