ADVISORY COUNCIL
AIR QUALITY PLANNING COMMITTEE

COMMITTEE MEMBERS

KEN BLONSKI, CHAIRPERSON
IRVIN DAWID
WILLIAM HANNA
ROBERT T.P. HUANG, Ph.D.
ED PROCTOR

HAROLD BRAZIL
EMILY DRENNEN, MPA
JOHN HOLTZCLAW, Ph.D.
KRAIG KURUCZ

WEDNESDAY
OCTOBER 10, 2007
9:30 A.M.

7TH FLOOR BOARD ROOM

1. Call to Order – Roll Call

2. 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 Committee meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Committee’s purview. Speakers are limited to five minutes each.

3. Approval of Minutes of June 13, 2007

4. Bay Area Congestion Pricing Presentation by:

- David Burch, Principal Environmental Planner, Air District will provide introductions and involvement of Air District to date with the topic of congestion pricing.

- Jean Hart, Executive Director, I-680/Sunol Smart Carpool Lane will speak to the High Occupancy Toll lane project currently being planned for Alameda and Santa Clara counties, authorized by State legislation in 2004. (http://www.680smartlane.org/)

- Elizabeth Bent, Senior Transportation Planner, San Francisco County Transportation Authority will speak to the Mobility, Access, and Pricing Study for downtown San Francisco (http://www.sfcta.org/mobility) AND
The San Francisco Doyle Drive Value Pricing program, the key component of the Metropolitan Transportation Commission’s successful application to the U.S. Dept. of Transportation’s Urban Partnership Program. (http://www.mtc.ca.gov/planning/UPP/index.htm) {There were 27 regions from throughout the U.S. that applied for grants from this competitive federal program, only five were selected. New York City’s congestion pricing program ‘below 86th Street’ received the most funds and the most publicity}.

5. Committee Member Comments/Other Business

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

6. Time and Place of Next Meeting – 9:30 a.m., Wednesday, December 10, 2007, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment

CONTACT CLERK OF THE BOARDS - 939 ELLIS STREET SF, CA 94109
(415) 749-4965
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.
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<tr>
<td>Board of Directors Legislative Committee</td>
<td>Monday</td>
<td>24</td>
<td>9:30 a.m.</td>
<td>4th Floor Conf. Room</td>
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<tr>
<td>Board of Directors Budget &amp; Finance Committee</td>
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<td>Board of Directors Mobile Source Committee</td>
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<td>Board of Directors Public Outreach Committee</td>
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<td>Advisory Council Technical Committee Meeting</td>
<td>Monday</td>
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<td>9:00 a.m.</td>
<td>Board Room</td>
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<td>Board of Directors Regular Meeting</td>
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<tr>
<td>Advisory Council Air Quality Planning Committee</td>
<td>Wednesday</td>
<td>10</td>
<td>9:30 a.m.</td>
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<td>Advisory Council Public Health Committee</td>
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<td>10</td>
<td>1:30 p.m.</td>
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<td>Advisory Council Executive Committee</td>
<td>Wednesday</td>
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<td>Advisory Council Regular Meeting</td>
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<td>Board of Directors Climate Protection Committee</td>
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<td>4th Floor Conf. Room</td>
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<td>Joint Policy Committee</td>
<td>Friday</td>
<td>16</td>
<td>10:00 a.m. – 12:00 p.m.</td>
<td>MTC 101 - 8th Street Oakland, CA 94607</td>
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<td>Board of Directors Regular Meeting (Meets 1st &amp; 3rd Wednesday of each Month)</td>
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9/24/07 (2:41 p.m.)
P/Library/Forms/Calendar/Calendar/Moncal
1. **Call to Order:** Acting Chairperson Emily Drennen called the meeting to order at 9:38 a.m.

**Roll Call:** Emily Drennen, Acting Chairperson, Harold Brazil, Irvin Dawid, John Holtzclaw, Ph.D.; and Robert Huang, Ph.D.

**Absent:** William Hanna, Kraig Kurucz, Ed Proctor, Ken Blonski.

**Also Present:** Chairperson, Fred Glueck

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

3. **Approval of Minutes of April 11, 2007:** Ms. Drennen provided revisions to the minutes that will be incorporated into the final version. Chairperson Glueck moved approval of the minutes; second by Dr. Holtzclaw, minutes were approved unanimously.

4. **2007-2008 Wintertime Outreach:** *Mr. Richard Lew, Community Outreach Manager, Outreach and Incentives presented information to the Committee on Wintertime outreach.*

Mr. Lew provided the Committee a brief presentation on the following:

Spare the Air Tonight:
- Health advisories issued on nights when PM concentrations are forecast to be unhealthy for “sensitive groups”
- Voluntary program to encourage clean air choices
- Elements:
  1. Advertising
  2. Media and Employer Relations
  3. Website/AirAlerts
Mr. Lew provided the following update on Particulate Matter (PM).

- Particles 2.5 microns in size (1/20th size of a human hair)
- Can remain airborne for hours, days or weeks
- Potential to travel deep into the lungs
- Health effects may include:
  1. Coughing
  2. Eye irritation
  3. Asthma trigger

There are a number of sources where PM derives, some of which include:

- Wood-Burning Stoves
- Power Plants
- Heavy Duty Diesel Engines
- Cars and Trucks
- Industrial Sources

The Outreach Strategy for 2007-2008 will consist of the following:

- Media relations (press advisories which will include the Spare the Air Kickoff; press releases announcing major events and stories)
- Employer and community events (over 90-100 employer/community events per year; some of which include festivals, state fairs with bi-lingual speakers present)
- Asthma clinics (worked with over 70 clinics to spread the word about spare the air)
- Radio and television advertising (commercials with Executive Officer)
- Wintertime surveys (will conduct phone surveys about the public’s attitude and behavior)
- Expansion of the Woodstove change out program (currently in place in Santa Clara, with a proposal to expand it throughout the nine counties)
- Wintertime sparetheair.org web site
- Collateral materials include:
  - Video commercials
  - Bookmark about particulate matter
  - Tip card about wood burning
  - Handbook about wood burning and particulate matter

In conclusion, Mr. Lew provided an overview of the Air District’s Wood Smoke Strategy for the upcoming season. This information included:

- **Regulatory:**
  - Rule development public workshop July 2007
    - Mandatory wood burning curtailment
    - Visible emission limitation
• **Outreach:**
  – Inform public of new requirements and clean air choices
  – Improve awareness of PM/wood smoke health impacts

• **Incentives:**
  – Expected to kickoff in mid January 2008, plans are in place to go district-wide with a wood stove/fireplace change out program; which will subsidize purchases of new cleaner EPA certified wood stoves.

Ms. Drennen thanked Mr. Lew for his presentation and asked the Committee if they had any questions.

Chairperson Glueck suggested that fliers be distributed at stores such as Osh Hardware, Home Depot, Safeway, etc. in locations that sell bulk wood with permission from the vendors advising of the Spare the Air Program.

Mr. Dawid commented on the Spare the Air Tonight advisory notifications that were issued last season, referring to the frequency of the advisories.

Ms. Drennen expressed her excitement with regard to the wood stove change out program, extending to the 9 counties. Ms. Drennen wanted to know the cost of the subsidy that each family would receive, as well as the total budget for the subsidies. Mr. Lew indicated that the projected budget is between $100-$600 depending on whether the individual decides to use natural gas change out, or EPA certified wood stove, with the total budget still being worked on at this time.

Ms. Drennen thanked Mr. Lew again for such a great presentation.

5. **Committee Discussion on the Study “Still Toxic After All These Years – Air Quality and Environmental Justice in the San Francisco Bay Area” from a Planning Perspective:** *The Committee discussed the study co-authored by Dr. Manuel Pastor of the University of California Santa Cruz.*

Ms. Drennen provided the Committee with a brief background on “Still Toxic After All These Years” noting that both she and Chairperson, Ken Blonski thought it would be a great idea to have the Committee digest the presentation. Staff was requested to prepare a brief summary regarding any particular thoughts and ways that the Air District could respond with regard to changes to programs and policies as a result of this presentation.

Henry Hilken, Director of Planning, Rules and Research noted that the Air District appreciates Dr. Pastor for coming to the Air District on numerous occasions, and presenting the study he co-authored. Mr. Hilken noted that there are some overlaps and similarities between Dr. Pastor’s study and work being conducted under the Community Air Risk Evaluation (CARE) Program. Mr. Hilken noted that Dr. Phil Martien, Project Manager of the CARE Program would make a couple of remarks regarding the extent that the Air District was involved in the study, which was limited, as well as the thought of the Air District moving forward.
Dr. Martien, provided background information to the Committee on the Air District’s involvement in the study as well as a summary of the Air District’s findings. Dr. Martien noted that Dr. Pastor had several community meetings to discuss the issue, which various Air District staff members attended and were in communication with the group when developing the document.

In summary, Dr. Pastor looked at the correlation between race, ethnicity and toxic air contaminants in the Bay Area. The type of work that has been done in the South Coast region uses two different kinds of data sets, the toxic release inventory data set and the national air toxics assessment data set to conduct their study. Both data sets have been released by the U.S. Environmental Protection Agency, which are considered national data sets. The study noted the correlation and tried to test the assumption that land use and income was not the only driving factor, but that race and ethnicity was also an important consideration.

Dr. Martien noted that suggestions were made based on looking at cumulative impacts when doing health risk assessment type work, looking at social vulnerability, as some people are less able to see a doctor and have less access to healthcare, so individuals should be aware of that population moving forward in trying to reduce toxic air contaminants and that we should encourage meaningful community participation and meaningful actions, as these are the four principles that were laid out at the end of their report.

The Air District is willing to work with Dr. Pastor, so that local emissions data can be used and repeat their analysis can be used. Due to complications with the national data sets that were used, there has not been as much attention put specifically on the Bay Area. Therefore, the Air District was interested in having Dr. Pastor redo his work using CARE emissions data.

Dr. Martien noted that the study’s preliminary findings are similar to that of the CARE program. The principles that were laid out are principles that the CARE program can move on, although it was not very specific as to what needs to be done, but noted that the Air District does want to endorse and embrace those principles, as the Air District moves forward.

Dr. Martien also pointed out that when the CARE program discusses cumulative impacts, we are not just looking at cumulative impacts for toxic air contaminants, but the CARE program does look at all 189 contaminants that the Air Resources Board has defined. The CARE program does not look at PM in general, so there are health impacts from PM in general beyond just the toxic components of PM or the things that have been recognized as toxics such as diesel PM.

Ms. Drennen thanked Dr. Martien for the presentation to the Committee.

Ms. Drennen referenced the discussion guide that she prepared with regard to Dr. Pastor’s study, “Still Toxic After All These Years.” Ms. Drennen noted that the discussion would be based on the Guiding Principles, and the questions in relation to each one. The purpose of doing this is to see if the Committee agrees, disagrees or has further questions to pass along to the full Advisory Council and the Board.
Chairperson Glueck suggested the Committee be careful when interpreting the study by Dr. Pastor and to keep strong emphasis on a big factor that he identified, which was the language barriers and the one that Dr. Pastor did not mention was education. Chairperson Glueck stated that the economic constraints that put people in certain situations versus their educational constraints should be weighed carefully in terms of how the Committee addresses recommendations as well as the findings as they were presented.

Dr. Huang questioned staff about the priority of this issue with regard to the Air District’s Board of Directors. Mr. Hilken’s response to Dr. Huang noted that this is a very high priority and that the CARE program was created 3 years ago and the Board of Directors have been very strong supporters of the program, allotting resources in the budget. The idea behind the CARE program is to have a very robust regulatory program for criteria pollutants, a number of programs to reduce toxic emissions, but felt that there is more to do to try and identify the communities that are most affected by toxic air contaminants, those communities where the most vulnerable members of society live and really target mitigation strategies in those areas. This was the purpose of creating the CARE program, receiving strong support from both the Executive Officer and the Board of Directors.

The Committee discussed the following:

**Guiding Principle #1: Cumulative Impacts** – Does BAAQMD accept the bottom-line conclusions that “environmental inequity is alive and well in the Bay Area” and that there is a “separate and independent effect of race on estimated pollution burdens”?

The Committee agreed with the conclusion.

**Guiding Principle #2: Social Vulnerability** – How does BAAQMD already take into account factors of social vulnerability? How could we do better?

Mr. Hilken noted the Air District has resource teams that work in the various communities which include East Palo Alto and Richmond that meet bi-monthly to talk about issues as well as act as a facilitator in the communities. Mr. Hilken also noted the risk assessments that are completed as part of the permitting process, and there are very conservative assumptions about exposures that conform to state guidelines.

Past information reported earlier is that with some of the CARE findings, the Air District has targeted the Carl Moyer Grants in communities that are most impacted by all toxic emissions, particularly diesel. In the past rounds of the Moyer process, the Air District has targeted 50% of the funds in communities most impacted by toxic air contaminants using the CARE data.

Committee members concerns include communities that do not have monitors in place at this time. Mr. Lew responded that there are a series of monitors currently in place. Mr. Hilken interjected, noting that there are mobile monitors that can be moved but are limited in quantity.

Dr. Holtzclaw asked what type of speciation is conducted to determine the location/source of the pollutants. Dr. Martien responded that there are 20 plus stations throughout the Bay Area where samples are analyzed for toxic air contaminants. The ARB has 2 or 3 where they
sample for a fuller sweep of contaminants. Some of the information obtained can be used to determine the source, but air contaminants have multiple sources and look very similar.

Mr. Dawid questioned staff about the areas that have the worst air quality in the Bay Area and indicated that he does not feel that it is associated with race or ethnicity including Livermore and San Martien, asking staff explain the aspect of air quality and environmental justice.

Mr. Hilken’s response was that it is a matter of the pollutant. As ozone levels tend to be highest in the hot inland valleys including Livermore, Santa Clara Valley and eastern Contra Costa. This past winter, the most exceedances were in Vallejo and San Jose. Mr. Hilken noted that air toxics from some of the CARE maps that were shown indicate the highest concentrations included northeast San Francisco, western Alameda and Contra Costa Counties, and some in the Santa Clara Valley, as it depends on the pollutant.

Ms. Drennen asked if the Air District has a plan in place for having more air quality monitoring and actually determining the proactive prevention of pollution. Mr. Hilken responded to Ms. Drennen, informing her that this is the intent of the CARE Program. Dr. Martien also informed Ms. Drennen that the Air District has compiled an emission inventory in the first phase of the CARE program to look at where the toxic air contaminants are high and it has identified that West Oakland and part of San Francisco as being high. The focus at this time is West Oakland for numerous reasons, partly because there is a health risk assessment going on associated with the Port and also because of the CARE program having identified that as a region that should be looked at carefully for additional monitoring in the Air District’s budget, apart from the Environmental Protection Agency (EPA) grant.

Dr. Martien also informed Ms. Drennen that the idea is to use the data, to screen and find where the Air District should be focusing its efforts and then to really dig in to understand what is happening within that neighborhood. Lastly, Dr. Martien noted that the CARE program should also come up with mitigation strategies for example, the Green Ports Initiative that the Air District is currently working on.

Mr. Huang expressed concerns regarding the Air District having enough data to have measures in place instead of continuous monitoring. Mr. Hilken replied that the CARE program’s technical analysis and the mitigation strategies go parallel, and that the Air District not wait for years before anything is done. The use of Moyer funds have been targeted in communities impacted the most, and each year it has been revised. In the last call for projects the CARE data was used to target those Moyer funds in those impacted communities. The Green Ports Initiative is intended to reduce emissions from the Bay Area Ports, the Port of Oakland being the largest because there are serious air pollution impacts from port activities.

Dr. Martien noted that the purpose of the additional studies, as we know that diesel PM is bad and it is bad in West Oakland, but for example there is high diesel PM from ships and there is also high diesel PM from trucks.
Dr. Holtzclaw questioned if the Moyer funds could be used for putting in facilities for cold-ironing. Mr. Hilken’s response was that it could potentially be used for that, but the Moyer requirements from ARB have very specific cost effectiveness thresholds that have to be met. Therefore, typically the cold-ironing may be more costly.

**Guiding Principle #3: Meaningful Community Participation – How effective are our current outreach strategies for reaching communities of color and other communities affected by environmental injustice? How can we do better?**

Ms. Drennen noted that it was mentioned earlier that the Air District has a responsibility to reach the entire region, and wanted to know how effective is the Air District reaching these particular populations and how do we know that we are effective?

Mr. Lew indicated that the Air District has translation services at all public meetings and works with community groups to identify and send out multiple notices in the various languages.

Mr. Dawid suggested if the Air District is going to target specific areas, not necessarily targeting areas that are associated with traditional environmental justice. There is a preference of targeting areas that are associated with some kind of pollution geographic, which would encompass the affluent pollution areas, which include areas that are associated with criteria pollutants, for instance areas with woodsmoke.

Mr. Lew informed Mr. Dawid that there are currently six other resource teams that meet every other month and the group takes on several issues with the communities in San Francisco, Tri-Valley and Napa. The group is aggressive in outreach, not only to the impacted “environmental justice” communities, but to all nine counties.

Dr. Holtzclaw suggested that the Air District fund or provide grants to help communities in low income, low English language neighborhoods, without any reporting requirements, etc. Mr. Lew responded by informing Dr. Holtzclaw that the Air District has provided many innovative grants, in particular the communities have asked for training on how to better participate in the environmental process, and how to better participate in community meetings with regulatory agencies.

Mr. Huang recommended the Air District seek out champions. The champions would consist of individuals who have an interest and has dedication to the community, but does not have the means to advocate.

Mr. Hilken also noted that as part of the CARE program, there is a CARE Task Force that advises staff and provides input and draft materials as part of the CARE program, which is comprised of community members, environmentalists, business, government, academics, health professionals and a variety of representatives. Several community representatives that are on the Task Force are very active in their communities and participate regularly in the CARE Task Force meeting.

Ms. Drennen commented that one of the proposals noted by Dr. Pastor was that the CARE program should be revised to provide more detail for neighborhood level analysis, and thought there was not enough detail according to the author.
Dr. Martien responded that the Air District is attempting to do additional monitoring, because in other communities where they have done health risk assessments, the reporting can be difficult as there are many communities and make fine scale measurements. For a finer level of detail, one would need to go out to the neighborhoods and make measurements, and the EPA grant that the Air District proposed would address that.

“Develop real community-based participatory research projects.”

Ms. Drennen acknowledged that this was touched upon earlier, with regard to the innovative grants that have been distributed and was wondering if there was a permanent structure of how to fund some of these projects. Also, if there was a particular grant program that was specifically for doing that type of work, that might spark community interest in doing some of these projects that the Air District might not otherwise get if it was just an open project.

Dr. Martien’s comment to Ms. Drennen’s statement noted that one of the things that the Air District is planning to do in West Oakland is a traffic survey of trucks and part of that is planning to work with the community to help the Air District do surveying of traffic in the area, stating that this is something that the community people have done in the past and the Air District is hoping to get community participation along with the survey.

**Guiding Principle #4: Meaningful Action**

Ms. Drennen mentioned that a lot of the issues that were brought up relate to data sets and the effectiveness of the data sets and access to the data sets. Ms. Drennen asked if there are data sets that the Air District is not sharing with individuals and Mr. Hilken replied no, unless it is trade secret, as everything is available. Dr. Martien noted that the CARE emissions data are available as well.

Ms. Drennen asked about the proposal of collaborating more with stakeholders to expand inventories of unregulated sources and requested a response from staff. Dr. Martien replied informing Ms. Drennen that the Air District does have sources that are unregulated and that the Air District does make estimates for in the CARE inventory, and that if there are things that the Air District is not aware of then, obviously, they are not in the inventory.

Dr. Huang asked that in terms of collaboration, if the Air District is collaborating with the other two regional agencies, MTC and ABAG, on some of the issues that the Air District is dealing with and, if so, to what extent. Mr. Hilken noted that the Air District has worked with ABAG and MTC for many years, and more recently the Joint Policy Committee (JPC) was created a few years ago by state legislation and its 7 representatives from the Air District Board, the MTC Commission, ABAG Board, and the Bay Conservation and Development Commission (BCDC). They meet regularly, specifically to promote better coordination between the agencies. A lot of the work that they have looked at recently, has been on some of the Smart Growth visioning process which is going on around the Bay Area. The JPC has also looked at climate change. The JPC has also discussed issues related to exposure to air pollutants and last year the JPC invited individuals from ARB to speak regarding the Land Use Guidance Handbook that was published last year.
Ms. Drennen noted that the thing she found most interesting in the report was the idea of a cumulative impact approach versus the more generalized site specific approach regulatory-wise. She asked how does this approach sit with the Air District and if it is different than what is currently in place. Mr. Hilken responded by saying that Dr. Martien noted that this is the purpose of the CARE program. It is not done as a part of the permitting a risk screens for a permit, which are just for the impacts from that facility and that is based on state guidelines from the Office of Environmental Health, Hazard Assessment (OEHHA). The intent of the CARE program is to get a more comprehensive cumulative view.

Ms. Drennen asked if the Committee members had any particular proposals or ideas after reading the report and hearing the presentation about how the Air District could respond to some of the ideas.

Mr. Dawid asked if the air quality will be better in 10 to 15 years than it is today. Mr. Hilken said that it is hard to say because one has to factor in traffic volumes increasing, but it is certainly true that the vehicle fleet is much cleaner than it used to be and we are all aware, that every year the ozone precursor emissions go down. Although, vehicle miles traveled increases, just because the fleet turns over, there are more new clean vehicles on the road. The same is true for diesel vehicles, but they are further behind the curve. In the future, yes, there are more stringent State and Federal regulations for diesel vehicles. How will this balance out? The Port of Oakland is projecting to double the amount of cargo that they handle, so the fleet will get cleaner.

In reference to ARB’s Land Use Guidance, Mr. Brazil asked Mr. Hilken if he sensed that other communities are actually using this. Mr. Hilken stated that San Francisco is using the guidelines. The Department of Public Health has been following this closely. The Air District has worked with the Department of Public Health in 2005, the year the handbook was published. The Air District also co-sponsored a workshop at U.C. Berkeley on ARB’s handbook. Rajiv Bhatia, M.D, the official at S.F. Department of Public Health, has been very proactive and Mr. Hilken suggested that the Committee consider inviting him to a future meeting.

Mr. Brazil also asked about the guidance component of the CARE program, would there be anything from the ARB guidance included in the CARE program? Mr. Hilken noted that one of the mitigation efforts the Air District plans to undertake as part of the CARE program is exactly the Land Use Guidance.

Ms. Drennen thanked staff for being responsive to this issue.

6. Committee Member Comments/Other Business. There was none.

7. Time and Place of Next Meeting. 9:30 a.m., Wednesday, August 8, 2007 – 939 Ellis Street, San Francisco, CA 94109.

8. Adjournment. 11:24 a.m.

Vanessa Johnson
Executive Secretary
I-680 HOT Lane Update

Prepared for the Bay Area Air Quality Management District

October 10, 2007
I-680 HOT Lane Project

• Bay Area’s first toll lane project.
• 14-mile stretch of southbound I-680 over the Sunol Grade.
  – Starts at Highway 84 on the north
  – Ends at Highway 237 on the south
  – 11 miles in Alameda County, 3 miles in Santa Clara County
How It Will Work

- HOT lane is free for carpools and other normal HOV users.
- Solo drivers can choose to pay to use carpool lane.
- No toll booths -- pay via FasTrak transponder.
- Toll rises when traffic on other lanes is more congested.
Who Will Use HOT Lane

- Parents with waiting kids.
- Workers with deadlines.
- Contractors with appointments.
- Anyone in a hurry.
- Carpoolers and transit vehicles continue to use the lane for free.
I-680 Poll Results

- Commuters support the HOT lane by 2-to-1 margin (64% to 33%).
- Most commuters (59%) would use the HOT lane.
- Enough drivers would be regular users to make the project financially successful without clogging the HOT lane.

(Source: 2007 poll by SA Opinion Research)
HOT Lane Operations

- Free for HOV users 24/7.
- Toll for solo drivers 24/7 -- minimum toll $1.
- No toll booths -- pay via FasTrak transponder without slowing down.
- Limited entry/exit points.
- Solo drivers decide each trip based on their need and the current toll.
- Strict enforcement.
Lane Alert Sign -- 1 mile

Carpool Lane Entrance
1 Mile
Fasttrak™ OK
Toll Rate Sign -- 1/2 mile

<table>
<thead>
<tr>
<th>CARPOOL TOLL FREE</th>
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<tbody>
<tr>
<td>FASTRAK™ TOLL</td>
</tr>
</tbody>
</table>

| TO Mission 262 | $2.50 |
| TO Calaveras 237 | $3.50 |
Southbound
I-680
HOT Lane

Lane Entry Sign
HOT Lane Timeline

- Utility relocation -- 2007
- Final design -- 2008
- Construction begins -- 2008
- HOT Lane opens -- 2010
Cost and Revenue

Construction costs $20.9 m
Electronic Toll System costs 11.4 m
Other costs 8.1 m
Total Project Cost $40.4 m

Projected Revenue: $5 m / year
Where Revenue Will Go

Toll revenue will pay for:

1. Operating and maintaining the toll facility.
HOT Lane Benefits

- New choice for solo drivers -- pay to travel faster/save time.
- Regular or occasional use is OK.
- No change in HOV lane benefits for carpool users.
- Limited access improves safety.
- Revenue to fund corridor improvements.
Tell Us What You Think

- Check the project website: www.680smartlane.org
- Contact us at info@680smartlane.org
PRESENTATION OUTLINE

- The Congestion Problem
- The Policy Response: Congestion Pricing and Mobility Investment
  - Defining Congestion Pricing
  - Case Studies
- The Mobility Access and Pricing Study
- USDOT Urban Partnership program
The CONGESTION PROBLEM

Congested Transit Routes

Source: SFCTA, Spring 2006 LOS Monitor

Congested Auto Routes

Source: SFCTA, Spring 2006 LOS Monitoring
TRAVEL to DOWNTOWN SF

- 1,000,000 trips daily to Downtown, Civic Center, and SOMA
- 400,000 trips in the AM/PM peak periods

Mode Share to downtown SF (daily)

- **Auto**: 532K (50%)
- **Transit**: 304K (28%)
- **Other**: 240K (22%)

Mode Share to downtown SF (during PM peak)

- **Auto**: 85K (44%)
- **Transit**: 79K (41%)
- **Other**: 28K (15%)

Source: SF-CHAMP
TRAVEL to DOWNTOWN SF

- Transit mode share to/from downtown (41%, pm peak)
  - San Francisco: 25,000
  - Bay Area: 51,000
    - South Bay/Peninsula: 23%
    - East Bay: 66%
    - North Bay: 42%

Daily Trips to/from San Francisco (2005)

Source: SF-CHAMP
SYSTEM IMPACTS of CONGESTION

*Congestion causes significant delays*

- Half of average regional trip spent in traffic
- 7.3 million hours lost to drivers daily by 2030
  - Delay could grow to almost ¾ of average trip
- Downtown & SOMA experience worst delays (about ¼ of regional delay)

<table>
<thead>
<tr>
<th>Top Ten Congested Areas in the Bay Area</th>
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<tbody>
<tr>
<td><strong>SOMA</strong></td>
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<tr>
<td><strong>Downtown</strong></td>
</tr>
<tr>
<td><strong>South Bay</strong></td>
</tr>
<tr>
<td><strong>“Hill Districts”</strong></td>
</tr>
<tr>
<td><strong>East Bay</strong></td>
</tr>
<tr>
<td><strong>Western Market</strong></td>
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<tr>
<td><strong>Mission/Potrero</strong></td>
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<tr>
<td><strong>North Bay</strong></td>
</tr>
<tr>
<td><strong>“Coit”</strong></td>
</tr>
<tr>
<td><strong>Noe/Glen/Bernal</strong></td>
</tr>
</tbody>
</table>

**2005 Delay per mile**

**2030 Delay per mile**

**Hours Lost by Delay Per Lane Mile**
SYSTEM IMPACTS of CONGESTION

Congestion degrades transit performance

- Bus speeds are 9 – 35% slower than autos
- Transit reliability continues to hover around 70%
- Many lines operating below 8 mph

SFTEP Survey Responses: Most Important Service Aspects

Source: SFMTA Transit Effectiveness Project
Private autos produced 47% of emissions in SF in 1990

- total eCO₂ was 9.1M tons
- projected to increase to 10.8M tons by 2012

SF reduction target: 20% below 1990 by 2012
(SF Climate Action Plan)

Source: SF Climate Action Plan
CONGESTION & the ECONOMY

- Congestion cost the region ~$42B in 2005

<table>
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<tr>
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<th>2005 Annual Congestion Cost (in millions)*</th>
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<tbody>
<tr>
<td></td>
<td>Cost of Lost Time</td>
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<tr>
<td>San Francisco</td>
<td>$1,725</td>
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<table>
<thead>
<tr>
<th></th>
<th>2030 Annual Congestion Cost (in millions)*</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Cost of Lost Time</td>
</tr>
<tr>
<td>San Francisco</td>
<td>$2,850</td>
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</tbody>
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* Figures are rounded and may not total exactly
Source: SF-CHAMP
CONGESTION and QUALITY OF LIFE

❖ Road safety
  ▪ 9% reduction in pedestrian injuries (London)
  ▪ 20% increase in bicycle trips (London)

❖ Public health
  ▪ Lower emissions
  ▪ More active lifestyle

❖ Community & civic life
  ▪ More opportunities for participation and leisure time with family

“Traffic congestion affects virtually every aspect of people’s lives – where people live, where they work, where they shop, and how much they pay for goods and services.” – USDOT
POLICY RESPONSE—PRICING for MOBILITY

- Economic tool for managing scarce, underpriced resources
- SF Countywide Transportation Plan (2004)

<table>
<thead>
<tr>
<th>Transportation Action Categories</th>
<th>Estimated CO₂ Reduction (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Increase the Use of Public Transit as an Alternative to Driving</td>
<td>87,000</td>
</tr>
<tr>
<td>B. Increase the Use of Ridesharing as an Alternative to Single Occupancy Driving</td>
<td>42,000</td>
</tr>
<tr>
<td>C. Increase Bicycling and Walking as an Alternative to Driving</td>
<td>10,000</td>
</tr>
<tr>
<td>D. Support Trip Reduction Through Employer-Based Programs</td>
<td>28,000</td>
</tr>
<tr>
<td>E. Discourage Driving</td>
<td>155,000</td>
</tr>
<tr>
<td>F. Increase the Use of Clean Air Vehicles and Improve Fleet Efficiency</td>
<td>641,000</td>
</tr>
<tr>
<td>Total</td>
<td>963,000</td>
</tr>
</tbody>
</table>

Source: San Francisco Department of Environment
WHAT IS “CONGESTION PRICING”?

- Fee paid by drivers in congested areas or routes
- Revenues reinvested in improving transportation options
- “Barrier-free” detection and enforcement
- Public outreach and awareness
- Multiple, convenient payment methods
CONGESTION PRICING in PRACTICE

Benefits include:

- Reduced delays & traffic (13 – 26%)
- Increased speeds (20 – 39%)
- Better transit reliability & ridership (5 – 18%)
- Decrease in emissions (15 – 20%)
- Decrease in pedestrian injuries (~9%)
- Substantial net revenues ($54M – 193M)
GOALS/BENEFITS of CONGESTION PRICING

- Improving system performance and investment
  - Improved travel times
  - Reduced travel time variability
  - Increased speeds
  - Increased non-auto mode share

- Enhancing environment and quality of life
  - Improved air quality
  - Improved road safety
  - More leisure time, participation in civic life

- Maintaining economic vitality
  - Efficient goods movement (reliable deliveries)
  - Improved trips to trade, retail, employment centers
  - Decreased travel costs for individuals and businesses

- Supporting growth
  - Consistent with Transit First Policy
  - Better land use decisions

San Francisco Mobility, Access and Pricing Study
STUDY DESIGN & OBJECTIVES

- Feasibility for San Francisco
  - severity of auto and transit congestion
  - availability of auto alternatives

- Define and evaluate potential mobility packages
  - mobility and accessibility
  - environment quality of life
  - economic vitality

- Determine costs and revenues of potential packages

- Develop recommendations and/or potential implementation plan
WHAT WE’VE LEARNED FROM USERS...

- 88% of travelers consider downtown SF congested
- 60% of travelers visit downtown SF in off-peak hours
- Vast majority of travelers have transit options
- Top benefits expected: improved environment and traffic reduction
- Top concerns: business impacts, affordability, and skepticism
ADVISORY COMMITTEES

- **Policy Working Group**
  - SFMTA
  - Mayor’s Office of Economic Development
  - BART
  - MTC/BATA
  - SF Planning Department
  - Caltrans
  - Golden Gate Bridge District
  - Alameda County Congestion Mgmt Agency
  - FHWA, FTA

- **Business Advisory Council**
  - Bay Area Council
  - SF Chamber of Commerce
  - Union Square Association
  - Market Street Association
  - Transportation Mgmt Association
  - UCSF
  - PG&E
  - AAA
  - Etc...

- **Technical Advisory Committee**
  - SFMTA
  - BART
  - Caltrain/SamTrans
  - AC Transit
  - MTC/BATA
  - ABAG
  - Bay Area Air Quality Mgmt District
  - Golden Gate Bridge District
  - Port of SF

- **Stakeholder Task Force**
  - SPUR
  - TALC
  - Sierra Club
  - Livable City
  - SF Bicycle Coalition
  - Senior Action Network
  - Walk SF
  - SF Convention & Visitors Bureau
  - Etc...
WORKSHOP DETAILS

Kick-off Workshop planned: October 17, 5pm – 8 pm, Milton Marks Conference Center (Civic Center)

❖ Goals:
  ▪ Raise concept/study awareness
  ▪ Collect feedback on wants and concerns
  ▪ Collect feedback on potential alternative designs

❖ Open house:
  ▪ Existing conditions
  ▪ Concept/study education
  ▪ Case studies

❖ Breakout sessions:
  ▪ Pros & cons of congestion pricing
  ▪ Design your own program
CURRENT MAPS TEAM ACTIVITIES

- Model development
- Alternatives design
- Transit operator interviews
- Market research
- Direct outreach, workshop planning

Workshop 1: Issues & Goals
Workshop 2: Preliminary Mobility Packages
Workshop 3: Evaluation of Revised Packages

Baseline Analysis & Case Studies
Develop Preliminary Mobility Packages
Refine & Evaluate Mobility Packages
Recommendations & Next Steps

WINTER 2007
SUMMER 2008
USDOT URBAN PARTNERSHIP PROGRAM

SF selected as a US DOT Urban Partner; Region to receive $159M in grant funds

- Doyle Drive Value Pricing Program is centerpiece

- Program demonstrates US DOT’s 4Ts of congestion management:
  - tolling (congestion pricing)
  - transit and ferry investments
  - technology
  - telecommuting

- Implementing agencies include: SFCTA, MTC, SFMTA, GGBHTD and Caltrans

- Legislative authority is required to access grant funds
Highest priority safety project in the state
- Worst rated bridge in the state (seismic), 2 of 100 Federal rating

Parkway design to replace Doyle Drive (broad consensus)

$810M project: $605M committed in state & local funds
- Urban Partnership program offers additional $35M Federal funds

Existing facility tolled to fill funding gap (~$165M), manage demand
SAN FRANCISCO UPP ELEMENTS

- **Doyle Drive Value Pricing Program (1)**
  - toll Doyle Drive to close funding gap and manage congestion

- **Arterial management (2, 3)**
  - SFgo; transit signal priority

- **Smart parking (4)**
  - variable pricing
  - real-time information on availability

- **Integrated mobility account**
  - TransLink, FasTrak, parking, road pricing

- **Expansion of City telecommuting program**
DOYLE DRIVE VALUE PRICING PROGRAM

Travel Patterns:

- Most trips destined for downtown
  - 120,000 daily
  - 58,000 inbound
  - 16,500 inbound during AM peak

- Most trips from North Bay
  - 85% during AM peak hours
  - 70% during off-peak hours

Tolling Design:

- Preliminary toll studies: $1-$2/day could shift 10%-12% of traffic to off-peak or transit

- Updated toll study to be conducted pending CHAMP 4.0 model completion
**UPA to INFORM WIDER PRICING DECISIONS**

*MAPS is a feasibility study;*
*UPA project is a demonstration project*

- UPA to demonstrate value:
  - Close Doyle funding gap with self-help
  - Manage peak period demand
  - Showcase technology
  - Concept of re-investing revenue in the Doyle/101 corridor
  - Build public trust in government to deliver
    - Transparent public process
    - Public participation

- Monitoring and evaluation of Doyle program will help inform decision-making for potential area-pricing in SF
THANK YOU!

www.sfmobility.org

415.522.4819

mobility@sfcta.org