



City and County of San Francisco  
 DEPARTMENT OF PUBLIC HEALTH

Gavin Newsom  
*Mayor*  
 Mitchell H. Katz, MD  
*Director of Health*

OCCUPATIONAL & ENVIRONMENTAL HEALTH  
*Program on Health Equity and Sustainability*

Rajiv Bhatia, MD, MPH  
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March 13, 2009

Joy Navarrette  
 San Francisco Planning Department  
 1650 Mission Street, Suite 400  
 San Francisco, CA 94103

**Re: Environmental Impact Assessment for the Executive Park Subarea Plan**

Dear Ms. Navarrette:

Thank you for the opportunity to comment on the **Initial Study and Scope of the Environmental Impact Assessment for the Executive Park Subarea Plan**. In November 2006, we submitted a brief letter to Paul Maltzer which identified some potential environmental health issues for the proposed Executive Park SubArea Plan (see attached). This letter provides more specific comments on the scope of the supplemental EIR based on the initial study.

Overall, the physical location and lack of existing infrastructure and services in the Executive Park raises a number of issues for environmental health for existing and future area residents. The site location near Highway 101 and Harney Way’s designation as a truck route in the Bayview Transportation Improvements Project and projected increases in local truck traffic are particular areas of concern. These issues warrant attention, analysis, and possible mitigation through the CEQA process. SFDPH is interested and willing to support you either through review and comment on subsequent analysis of the EIR or through application of existing conditions assessment and forecasting tools that we have developed in our health and urban planning program. (A list and description of our health and planning tools is available at [www.sfphes.org](http://www.sfphes.org).) Below are the key issues identified in our review of the Initial Study.

- (1) **Air Quality-** The discussion of analysis of near source emissions from freeways in the initial study does not appear consistent with current city policy and CEQA practice regarding roadway air pollutant health impacts (Page 47). The Initial Study should acknowledge new city requirements for air quality hotspot assessment and mitigation under Article 38 of the San Francisco Health Code. Proximity of the Yerby and UPC projects to Highway 101 will trigger assessment requirements for PM 2.5 from all adjacent mobile sources. The project could consider alternatives in design and location of residential structures to reduce air quality impacts from Highway 101 as well as Harney Way. In addition, as an improvement measure, the project may want to consider the early adoption of CARB standards for on road and off road diesel engines (currently being phased in) to construction equipment used for project development.
- (2) **Environmental Noise-** As discussed in the initial study, the project area is adjacent to several sources of substantial environmental noise. Analysis of environmental noise should include measured and predicted sound levels from existing and expected traffic on Highway 101 Harney Way. We recommend that analysis for the EIR should use modeling software (e.g. SOUNDPLAN) that takes into account natural and building topography. Because of topography, detailed sound level analysis is required to inform design for exterior to interior acoustical insulation under Title 24. The proposed Yerby and UPC projects are close to the freeway and at elevated risk of exposure to noise pollution. Noise from truck traffic on Harney Way is an additional concern for adverse

noise impacts. The EIR should reference and discuss new citywide standards for indoor noise and mechanical noise in Article 29 of the Police Code. Specifically, mechanical noise sources should produce noise no greater than 5dB over ambient levels at the property plane for residential uses and no more than 8 dB over ambient for commercial uses. New noise sources in the project areas should be evaluated for conformity with Article 29 standards. Mitigations could consider not only Title 24 requirements for indoor environments but also how to design and locate new structures to buffer public space, common space, courtyards, and play areas. As a mitigation measure, the City or project sponsors could also consider discussion or negotiation with CalTrans regarding the feasibility and value of sound walls.

- (3) **Pedestrian Access and Safety-** The Executive Park Health Impact Assessment, conducted by SFPDH on the Subarea Plan, noted that streetscape guidelines within Executive Park did not extend to the typical routes pedestrians and bicyclists would use to access nearby parks, schools, transit, essential goods, and surrounding neighborhoods. Overall, existing conditions at the project area suggest substantial traffic hazards for pedestrians and bicyclists, both for area residents walking and bicycling to adjacent neighborhood amenities and for people coming to the project area via non-motorized means. For example, although Candlestick Park State Recreational Area is noted as an important open space resource for Executive Park residents, we are not aware of plans to implement safe pedestrian walkways to the park across Harney Way, designated as a truck route in the Bayview Transportation Improvements Project. Application of SFPDH's Pedestrian Environmental Quality Index (see figure below) found that pedestrian quality near Executive Park, including access to Visitacion Valley, is quite poor - with few existing pedestrian amenities (e.g., pedestrian-scale lighting, street furnishing, crosswalks and other intersection safety treatments, traffic calming, etc.).

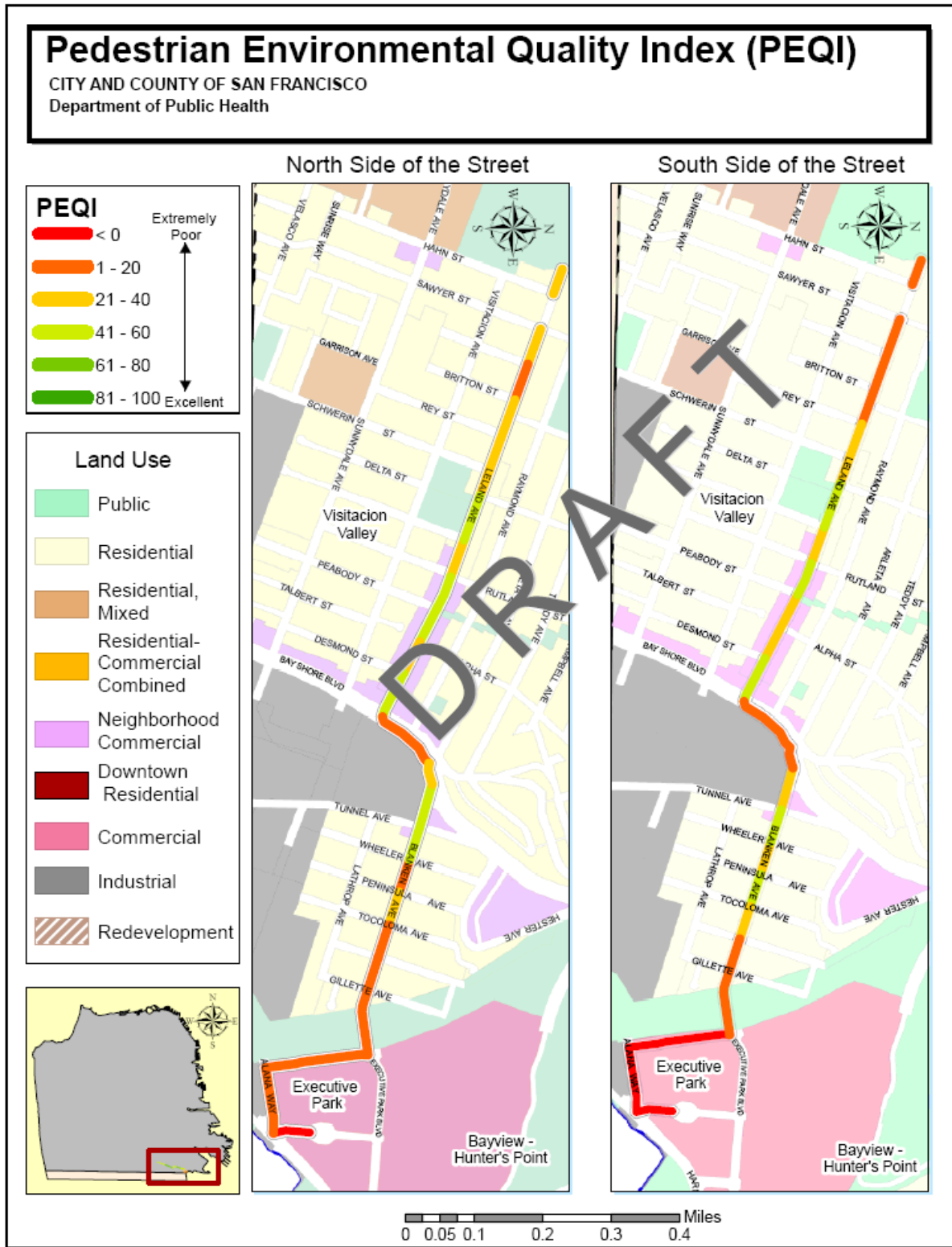
The SEIR should evaluate existing conditions for pedestrian and bicycle safety and the cumulative effects on pedestrian and bicycle hazards and collision frequencies in the project area. Our preliminary analysis of Pedestrian Quality for the Executive Park SubArea Plan found that pedestrian quality in the areas just north of the Schlage Lock site, specifically along Bayshore Boulevard near the Third Street Light Rail stop, and along segments of Blanken Avenue, were poor pedestrian environments that could benefit from greater investments to promote walking and biking to/from Leland Avenue and Candlestick Park. The SEIR could utilize this analysis or conduct an updated analysis of the pedestrian environment using the San Francisco Pedestrian Quality Index ([http://www.sfphes.org/HIA\\_Tools\\_PEQI.htm](http://www.sfphes.org/HIA_Tools_PEQI.htm)).

The increased traffic along Harney Way - due to development in Executive Park and Candlestick Park as well as the re-routing of the truck route along Harney Way - will further increase hazards to pedestrians. SFPDH research documents that small area-level differences in vehicle-pedestrian injury collisions are dependent on resident and employee population, neighborhood commercial uses, high traffic volumes and arterial street types. Without mitigations, the increased population at the project would be subject to these hazards and therefore increased risk of injury and death while walking.

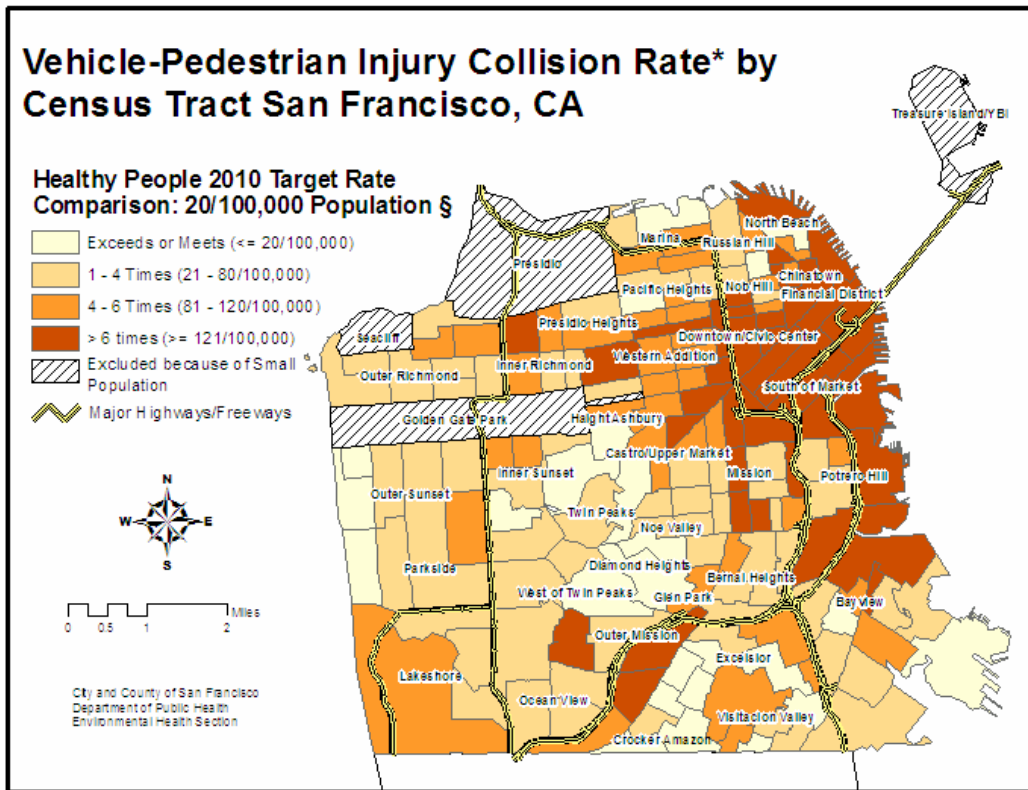
The discussion of baseline conditions should include data on pedestrian-vehicle collisions in the project area. The attached map below illustrates pedestrian-vehicle collision rates in San Francisco along with relevant area level differences. In addition to assessing where new resident populations will be introduced and their potential pedestrian routes, providing a map of the location of pedestrian-vehicle collisions in the project area over the past 10 years would be helpful in identifying high hazard locations that could benefit from focused pedestrian design efforts.

The SEIR should also consider how improvements in the pedestrian environment in the area may be feasible and appropriate mitigations. In the SEIR, it would be helpful to provide clarity on

whether and how existing community impact funds have been or will be utilized to make pedestrian improvements between Executive Park and local amenities.



From Page 37 of the *Executive Park Subarea Plan Health Impact Assessment Report*. Available online at: [http://www.thehdm.org/executive\\_park.php](http://www.thehdm.org/executive_park.php)



\* Based on 2001-2005 collision data provided by the California Highway Patrol, Statewide Integrated Traffic Records System (SITRS) and 2000 population data provided by the U.S. Census.

‡ U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

† Based on the HP 2010 targets of 10 nonfatal pedestrian injuries + 1 pedestrian death per year per 100,000 population.

(4) **Transportation** – The Initial Study acknowledges that Executive Park, combined with the other surrounding development projects, will have significant impact upon transportation and circulation. The Executive Park Subarea Plan outlines a Transportation Management Program to “increase public transit ridership levels among the residents of Executive Park” and “divert residents from their cars to public transit” to “provide property owners with an array of alternatives to driving to and from Executive Park.” Notably, the proposed plans include roughly 1.4 spaces per unit of structured parking. These levels of structured parking do not appear consistent with a transit-oriented community. Both to address transportation impacts and the environmental quality benefits of transportation demand management, we recommend that the EIR analyze the effectiveness and feasibility of specific TDM tools and strategies for this project given its location and acknowledged constraints for transit level of service and accessibility, pedestrian, and bicycle users. We further recommend that the project consider mitigations with a measurable and monitorable TDM goal that reflects an achievable limit on average trips per household per day, and quantify the anticipated impact of the implementation of different TDM program components on vehicle trips generated by the project.

(5) **Recreational Facilities** – See the comment under the pedestrian safety above.

(6) **Public Services** – The Initial Study acknowledges that development within Executive Park will have a significant impact on community facilities in the surrounding areas and development in the SubArea is subject to the Visitacion Valley Community Facilities and Infrastructure Fee and Fund (VVCIFF). According to the Initial Study, these fees which have been collected from the existing

and under construction projects in Executive Park, will be levied on the proposed Yerby and UPC projects as well. Given the revenues generated from these fees and the proposed community center within the Yerby development project, the Initial Study states that the “projects would not have a significant effect on other community facilities and this topic will not be discussed further in the SEIR.” The VVCIFF Ordinance and Executive Park Subarea Plan outline some of the potential ways in which the impact fees will be allocated to address potential impacts (e.g., playground improvements, library and community facilities construction, and streetscape improvements). In the SEIR, it would be helpful to provide clarity on how the funds will be allocated and how they will contribute to meeting the specific public service needs of future Executive Park residents.

- (7) **Cumulative Impacts** - In the Initial Study, it is acknowledged that there are multiple projects in the surrounding area which have the potential to substantially impact current and future residents of Executive Park. Specifically, redevelopment in Visitation Valley, continued redevelopment of Hunters Point Shipyard and Hunters Point/India Basin, and redevelopment of Candlestick Point/Monster Park/Bayview Waterfront are anticipated to account for 45% of citywide population growth in San Francisco over the next twenty years. At the same time, redevelopment in the Brisbane Baylands and the Harney Way/U.S. 101 interchange will further compound the dramatic demographic, environmental and transportation changes in this area. The Initial Study states that the SEIR will evaluate the cumulative impacts of transportation and circulation, noise, and air quality. SFDPH wishes to underscore the need for careful consideration and calculation of the cumulative impacts for all of the impact assessment areas and issues discussed above and appropriate consideration of associated mitigations.
- (8) **Compliance of Existing Structures** - It would be useful if the SEIR could clarify how the Executive Park Subarea Plan’s design guidelines related to transportation management, streetscape improvements, and green building requirements have applied or will apply to existing projects in Executive Park, as well as those currently under construction (specifically the Candlestick Cove/Signature Properties and the St. Francis Bay/Top Vision projects). These projects developed after the publication of the draft Executive Park Subarea Plan constitute over 40% of the Executive Park population.

Our Department would be happy to discuss how we can help support the EIR. We would also like to reaffirm that the Executive Park Health Impact Assessment conducted in 2006 may be a helpful resource as you move forward in your EIR process. Please contact me at (415) 252-3982 if you would like to discuss these comments any further.

Respectfully,



Rajiv Bhatia, MD, MPH  
Director, Occupational & Environmental Health



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**OCCUPATIONAL & ENVIRONMENTAL HEALTH**  
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Rajiv Bhatia, MD, MPH  
*Director of OEH*

November 27, 2006

Paul Maltzer  
Environmental Review Officer  
San Francisco Planning Department  
1660 Mission Street, Suite 500  
San Francisco, CA 94103

Dear Paul,

Thank you for the opportunity to comment on the **Executive Park Subarea Plan Environmental Impact Assessment**. As you know, the San Francisco Department of Public Health Environmental Health Section (SFDPH-EHS) often analyzes public health, air quality and hazardous materials issues within environmental impact reports for the SF Dept of Planning. More recently, SFDPH has begun to respond to a broader set of environmental health problems associated with land use, housing and transportation policies through research, analysis and development of assessment methods and forecasting tools. I am writing to share these environmental health methods and tools with you that may be useful and relevant to the EIR for this Plan.

Overall, on a regional level, development of Executive Park has the potential to provide significant environmental and social benefits. Nevertheless, the physical location and existing infrastructure and services status of Executive Park raises a number of local environmental health issues that may warrant close attention, analysis, and mitigation. Some of these issues include:

1. Respiratory health effects due to the project's location relative to Highway 101;
2. Health effects related to area environmental noise;
3. The quality and safety of pedestrian and bicycle routes from the project to area retail, schools and transit;
4. The adequacy of existing and proposed public transportation and associated impact on auto dependency, traffic volume and vehicle emissions;
5. The accessibility of public infrastructure and goods/services (e.g. schools, libraries, neighborhood parks, grocery stores, and childcare);
6. The cumulative impacts of development in the region including Executive Park, Schlage Lock, Monster Park, Cow Palace, Geneva Avenue, and the Baylands upon transportation, housing demand, access to goods and services, demands on public infrastructure and possible gentrification or displacement of existing residents.

I believe that the analytic tools mentioned above may be useful in evaluating the aforementioned issues. Below, I have listed several of these tools along with a brief description of their purpose and status, as well as the contact information for the SFDPH staff working on the model/tool.

Our department is currently operating on limited resources, but we would be happy to discuss potential collaboration with you and any EIR consultants to apply these models to Executive Park and other projects. Our work in environmental health effects forecasting is relatively new and practical application would benefit our development of these tools. More important, conducting analyses of the current and potential future noise, air quality, pedestrian safety, and quality of the pedestrian environment, and making relevant mitigations, would create a healthier environment for residents of Executive Park and the surrounding neighborhoods.

Please contact me at (415) 252-3982 or the specific staff person if you would like to discuss any of these models or a potential partnership.

Respectfully,

A handwritten signature in black ink, appearing to read 'R. Bhatia', with a long horizontal stroke extending to the right.

Rajiv Bhatia, MD, MPH  
Director, Occupational & Environmental Health

## Health Impact Assessment Models and Tools

*Developed by San Francisco Department of Public Health, Environmental Health Section*

Name	Description	SFDPH Staff Contact
Pedestrian Flow Model	A practical forecasting model of pedestrian activity for San Francisco that relates environmental characteristics to pedestrian flow in mixed-use neighborhoods. The demand model uses linear regression techniques, existing and original environmental-spatial data and observed street segment pedestrian counts. The model has been piloted on a section of Mission Street and is currently being validated.	Cyndy Comerford (415) 252-3989 <a href="mailto:cyndy.comerford@sfdph.org">cyndy.comerford@sfdph.org</a>
Pedestrian Environmental Quality Index (PEQI)	A quantitative observational instrument to describe and summarize street and intersection environmental factors known to affect people's travel behaviors at the street-level. Factors are grouped into five main categories: traffic, sidewalks, land use, intersections and safety. The model has been piloted in two areas: along Mission Street and along an area linking the Mission, South of Market and Potrero Hill neighborhoods in San Francisco.	Cyndy Comerford (415) 252-3989 <a href="mailto:cyndy.comerford@sfdph.org">cyndy.comerford@sfdph.org</a>
Pedestrian Injury Forecasting Model	A practical forecasting tool to predict changes in pedestrian injury associated with increased traffic volume and other spatial characteristics. The model has been piloted in Oakland and is currently being refined and validated for use in San Francisco.	Megan Wier (415) 252-3972 <a href="mailto:megan.wier@sfdph.org">megan.wier@sfdph.org</a>
Healthy Development Measurement Tool (HDMT)	A health impact assessment tool developed by numerous stakeholders involved in SF's Eastern Neighborhoods to support more accountable, evidence-based, and health-oriented planning and policy-making. In its current form, components of the Tool include: 27 Community Health Objectives, 140 Measurable Indicators, Established Standards, Baseline Data, Development Targets, and Evidence-based Health Justifications. The latest version is available at: <a href="http://www.sfdph.org/phes/enchia/enchia_HDMT.htm">www.sfdph.org/phes/enchia/enchia_HDMT.htm</a>	Lili Farhang (415) 252-3988 <a href="mailto:lili.farhang@sfdph.org">lili.farhang@sfdph.org</a>
Air Quality Modeling	A model to assess and monitor traffic-related air pollution, developed by SFDPH in a partnership with UC Berkeley School of Public Health. The research team is currently collecting data on traffic flows from a variety of sources as well as assessing residents', pedestrians' and bicyclists' exposure to traffic exhaust pollutants. Air quality is measured and modeled using CALINE4 for carbon monoxide, PM10, and nitrogen dioxide. URBEMS modeling is conducted and mitigation measures are evaluated, with special attention to local sensitive receivers and project-related vehicle miles traveled.	Tom Rivard (415) 252-3840 <a href="mailto:tom.rivard@sfdph.org">tom.rivard@sfdph.org</a>
Noise Modeling	A series of tools including noise field measurement, evaluation and "Soundplan" modeling to define the current noise level in San Francisco with special emphasis on understanding the effects of traffic volumes on the acoustical environment. SFDPH, in collaboration with the Building and Planning Department, is creating an updated Noise Element and Noise Map for the City's General Plan. This noise map will enable review of a project with respect to potential annoyances and other health impacts, as well as make recommendations for reducing noise exposures, especially to sensitive receivers.	Tom Rivard (415) 252-3840 <a href="mailto:tom.rivard@sfdph.org">tom.rivard@sfdph.org</a>