

September 1, 2006

Karoleen Feng
Project Manager
East Bay Asian Local Development Corporation
310 8th Street, Suite 200
Oakland, CA 94607

RE: Jack London Gateway Phase 2

Dear Karoleen,

First, we wanted to thank you for your participation in and cooperation with our rapid Health Impact Assessment (HIA) of the Jack London Gateway Phase 2 project. Considering the diverse ways that land-use affects health, incorporating health-supportive design and mitigation strategies into new development can do much to prevent avoidable disease and illness among Oakland's most vulnerable residents.

Growth and development currently happening in Oakland provides a critical opportunity to address long standing disparities in health, and we hope that HIA can be a constructive tool for achieving this goal. Health evidence can support environmentally protective and resource-efficient land use strategies such as mixed-use development, and can also help focus attention on the design and infrastructure needs for healthy and active living. At the same time, HIA can help analyze and mitigate potential harmful effects from development, including those related to locating new housing in historically industrial and high traffic areas.

We envision that a successful partnership between EBALDC and the West Oakland community using HIA framework can become an exciting model for other projects in Oakland and the greater Bay Area. We further understand that even good projects in isolation do not make healthy land use and that we need to gain a city commitment to the necessary comprehensive planning and financing of neighborhood infrastructure. We hope to have your continued support as we move forward and look forward to together showing the Planning Commission that such partnerships and processes can be successful as well as beneficial to the health of the community.

At this point, the community has completed a first phase of a rapid HIA on the JLG project and the results are shown in the attached spreadsheet. To preface, this rapid HIA provides a scope of the issues and solutions relevant to community health from the perspective of the participants along with a supporting health rationale. It suggests health-relevant issues, mitigations, and strategies for consideration. A full HIA would have taken significantly more time and resources and would have included detailed analysis of impacts and a statement of priority feasible recommendations for project design. Typically, a more robust HIA effort would be appropriate for a larger project or plan.

Even using this more abbreviated rapid HIA process, our participants recognized several important potential positive impacts on health that may result from this project, and appreciated the efforts you have made already to support positive health impacts. However, as the spreadsheet describes, we believe there are several additional unrealized potential health benefits and several potential negative health impacts of the project as it is currently planned. Although we would like to see changes and mitigations to address all of these concerns and believe they are all important, we have prioritized a few of them. We have also acknowledged where mitigations require city-developer cooperation. We would like to comment on those in this letter and we hope that you will implement changes and mitigations to the project that address them specifically. We realize that you believe you have already addressed some of these, but since we have no documentation showing this specifically, we include our comments on them here.

Outdoor Air Quality

The Project as described includes senior housing within 500 hundred feet of freeway 980. The project is also within 1200 feet of the Interstate 880 corridor. Proximity to these roadways results in relatively high levels of ambient particulate matter and other vehicle-related pollutants. In addition, as the Port of Oakland expands in the coming years, these emission levels will increase. Furthermore, truck traffic on Brush Street and on the other side of the project, on Market Street, is also detrimental to the air quality on the site and in the neighborhood. Lastly, we expect that the construction process could temporarily aggravate the air quality issues for existing residents around the project.

Potential Health Impacts

Without mitigation, future residents of JLG are likely to experience relatively higher rates of chronic and acute respiratory illness and higher rates of morbidity from asthma from traffic-related emissions compared to people living further from these roadways. Current neighborhood residents are likely to experience similar air quality effects during construction of JLG.

Evidence of Health Impacts

Nationally, motor vehicle related air quality impacts result in over 20,000 cases of chronic respiratory illness and 40,000 premature deaths. In particular, epidemiological studies have found consistent associations between living in proximity to a busy roadway and respiratory disease symptoms and lung function measures [M. Brauer et al., American Journal of Respiratory and Critical Care Medicine. 2002; 166: 1092-1098]. Examples of specific findings include:

- Increased asthma hospitalizations associated with living within 650 feet of heavy traffic and heavy truck volume [Lin et al. Environ Res. 2002; 88: 73-81.]
- Increased asthma symptoms with proximity to roadways with greatest risk within 300 feet. [Venn et al. American Journal of Respiratory and Critical Care Medicine. 2001; 164:2177-2180]

Air pollution exposure monitoring and modeling has confirmed that exposure to particulate matter, nitrogen dioxide and soot is much higher within 656 feet (200 meters) of freeways and other busy urban roadways. The California Air Resources Board

recommends not locating sensitive land uses, including residential developments, within 500 feet of a highway with more than 100,000 vehicles per day [<http://www.arb.ca.gov/ch/landuse.htm>]. Freeway 980 surpasses this vehicle load.

Studies Necessary to Evaluate the Potential Health Impacts

Gaining an objective understanding of air pollution exposure levels at the project site relative to nearby areas away from the freeway is the first step in evaluating the need for mitigations and planning mitigations. Despite the proximity to the freeway, air quality may be affected by wind patterns and other topographical and physical features. Measurements will help define the extent of the issue objectively and aid in planning appropriate solutions (e.g., locating the air intakes for ventilation systems.) In order to achieve this, we recommend that the developer take measurements of particulate matter at multiple elevations at the site and in the neighborhood more distant from busy roadways. Given the expansion of the Port of Oakland, we also recommend on-going measurement of air quality at the site and inside the proposed building.

Recommendations for Design Mitigations

We recommend:

1. Hiring a consultant to measure the air quality at the site and working with a consultant to implement the appropriate mitigations. We believe the goal should be that the air in the building should have particulate matter levels not more than 2-fold higher than other sites away from busy roadways in the neighborhood and that this be maintained in the coming years as the Port of Oakland expands. Depending on the results of the air quality measurements, to achieve this goal, mitigations could include: locating air intakes correctly; filtering the air; and making the building 'tight' (inoperable windows, no balconies). Additional mitigation may be required as the Port expands;
2. Working with current residents to make Market Street a non-truck street; and
3. Notifying all future residents of air quality risks associated with living in the housing.

Indoor Air Quality

While some of the housing is designated non-smoking, smoking will be permitted by residents on some floors of the building and will result in poor indoor air quality.

Potential Health Impacts

Without mitigation, future residents of JLG are likely to experience higher rates of chronic and acute respiratory illness and higher rates of morbidity from asthma as a result of poor indoor air quality caused by second-hand smoke.

Evidence of Health Impacts

The adverse health outcomes associated with second hand smoke are well documented. The 2006 US Surgeon General's report concluded that:

- Secondhand smoke causes premature death and disease in children and in adults who do not smoke.
- Exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes coronary heart disease and lung cancer.
- The scientific evidence indicates that there is no risk-free level of exposure to secondhand smoke.
- Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to secondhand smoke. Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate exposures of nonsmokers to secondhand smoke.

According to the American Cancer Society [www.cancer.org], in the US, secondhand smoke is responsible for:

- approximately 35,000 to 40,000 deaths from heart disease in people who are not current smokers;
- about 3,000 lung cancer deaths in nonsmoking adults;
- other respiratory problems in nonsmokers, including coughing, phlegm, chest discomfort, and reduced lung function;
- additional problems for children and pregnant women.

Studies Necessary to Evaluate the Potential Health Impacts

We recommend that EBALDC assess the demand for housing among non-smokers. Although EBALDC believes that limiting the occupancy to non-smokers would be detrimental to the rate at which the building achieves full occupancy, no evidence has been given that shows that the rate of occupancy would be unacceptable if the residents were required to be non-smokers. We believe that a non-smoking dwelling can be achieved without adverse financial consequences to the developer. According to the CDC, in California in 2004 (the latest year for which statistics have been released), less than 17% of the population were smokers and less than 14% of those 45 years and older were smokers (<http://www.cdc.gov/tobacco/datahighlights/index.htm>). These rates have been declining in recent years.

Alternatively, EBALDC might investigate asking smoking occupants to pay more as a disincentive to smokers and also might investigate insurance savings for buildings occupied by non-smokers. The American Lung Association may already have relevant information.

Recommendations for Design Mitigations

We recommend that EBALDC restrict occupancy of the entire building to non-smokers.

Noise

The Project as described includes senior housing within 500 hundred feet of freeway 980 and close to Brush Street and Market Street. Traffic on these roads will result in very high noise levels in and around the housing. Furthermore, noise from the retail area, such as car radios, is likely to add to the noise levels. Lastly, we expect that the construction

process could temporarily aggravate the noise issues for existing residents around the project.

Potential Health Impacts

Without mitigation, future residents of JLG are likely to experience chronic high noise levels that may result in annoyance, high blood pressure, and sleep loss. Noise levels in excess of 70 dB will prevent normal voice level communications at unprotected exterior locations (e.g., at the Brush Street entry) and will result in strained speech.

If standard construction hours are used, construction is likely to result in increased noise-related health complaints among some current area residents and current senior neighbors will have sleep interrupted by normal construction noise.

Evidence of Health Impacts

Long term exposure to moderate levels of environmental noise can adversely affect sleep, school and work performance and can lead to cardiovascular disease [C. Dora et al., Transport, Environment and Health: reviews of evidence for relationships between transport and health, World Health Organization, 1999]. The health impacts of environmental noise depend on the intensity, duration of exposure and context of exposure. The World Health Organization published a comprehensive synthesis of the health effects of noise [<http://www.who.int/docstore/peh/noise/guidelines2.html>], that describes effects including: “noise-induced hearing impairment; interference with speech communication; disturbance of rest and sleep; psychophysiological; mental-health and performance effects; effects on residential behavior and annoyance; and interference with intended activities.”

Studies Necessary to Evaluate the Potential Health Impacts

Design of the courtyard appears to acknowledge the need to shelter public activity areas from the ambient noise at the site. A more thorough understanding of current environmental noise measures at the project site and in nearby areas away from the freeway is important in understanding the mitigations needed. In order to achieve this, we recommend taking measurements of noise levels at the site and in the neighborhood more distant from busy roadways.

Recommendations for Design Mitigations

We recommend:

1. Using noise-insulating windows, and acoustical exterior doors and walls to meet Title 24 requirements;
2. Working with current residents to make Market Street a non-truck street;
3. Posting noise regulations in parking lot; and
4. Limiting the hours of construction to those that would limit the amount of sleep interruption of current neighbors, while allowing construction to move forward expediently.

Safety

The JLG project is in high crime area and the high volume of trucks in the neighborhood also leads to pedestrian injuries. Currently it is planned that the entry to the senior housing will be monitored and secured; that additional lighting will be added at JLG and its surrounding area; and that traffic features to reduce truck traffic on Market Street and to reduce traffic cutting across parking will be added. Currently, private security at existing JLG site does not have public's confidence.

The issue of safety in the area is linked to the issue of the use of the retail space. If retail attracts more customers and there are more people at the site, crime will be deterred. As the amount of crime decreases, it is more likely that more customers will be attracted. Therefore, we believe that the discussion of the retail space usage below is relevant for the issue of safety.

Potential Health Impacts

The added lighting from the proposed project and the additional population in the housing will likely deter crime somewhat by providing 'eyes on the street'. However, seniors are a likely target of crime and are therefore a vulnerable population. Residents may experience stress and restrict activity outside home because of fear of crime. If mitigations do not reduce crime: physical injury to senior residents will increase; the indirect effects of crime including fear, stress, and poor mental health will increase; and walking will be discouraged, leading to lack of exercise and reduction in benefits of walking.

Additionally, residents may be vulnerable to pedestrian injuries or restrict activity because of fear of injuries. The severity of injuries is greater for seniors at all vehicle speeds and seniors are at greater risk for pedestrian injuries due to age-related changes in vision, hearing and reaction times. Improved walkability (and bikeability) in the area would lead to benefits to all residents and neighbors.

Evidence of Health Impacts

Walking is the most common physical activity among Americans [CE Ross. Social Science and Medicine. 2000; 51:265-274]. Many studies have linked the amount an individual walks with actual or perceived safety, where safety includes both freedom from crime and freedom from pedestrian injury [for a review, see A Loukaitou-Sideris. Journal of Planning Literature. 2006; 20; 219-232]. A 1999 CDC study found that fear of lack of safety reduced physical activity most in those over 65, women, and minorities [Centers for Disease Control. Morbidity and Mortality Weekly Report. 1999; 48: 143-146]. Additional studies have linked fear of victimization with psychological distress [CE Ross. Journal of Quantitative Criminology. 1993; 9: 159-175].

Studies Necessary to Evaluate the Potential Health Impacts

We recommend that EBALDC obtain statistics on crime types and frequency in area and on the pedestrian injuries and fatalities in the area.

Recommendations for Design Mitigations

We recommend:

1. Increasing private security in the area if crime at the mall is high;
2. Taking the appropriate steps to increase the confidence of current residents in the existing private security;
3. Asking police to review security plans and offer suggestions for improvement;
4. Talking with NCPC (Neighborhood Crime Prevention Council) about suggestions for improvements;
5. Working with the City of Oakland to prioritize adding walkability amenities such as curb extensions, properly designed pedestrian protection medians on multilane crossings, audible countdown signals and high visibility multilane crosswalk markings to increase walkability to neighboring communities and to retail;
6. Providing the funds to install the walkability amenities adjacent to the project site;
7. Implementing traffic calming measures to reduce vehicle speeds;
8. Diverting through traffic around neighborhood;
9. Following the recommendations below with regard to retail planning as this impacts safety.

Retail Planning

The current plan for the retail space is unclear. Many options have been described, ranging from restaurants to medical services to national chain stores.

As stated above, the issue of safety in the area is linked to the issue of the use of the retail space. Therefore, we believe that the discussion of safety above is relevant for the issue of retail planning.

Potential Health Impacts

Overall, active retail uses that respond to neighborhood preferences and needs, would promote the local economy, help meet residents material needs, encourage walking, and deter crime and prevent physical harm and stress of residents. However, the costs and benefits of retail uses ultimately depend on the specific uses chosen.

Depending on specific retail and services offered, new retail or medical offices could provide needed services and retail to the community. If the retail space provides, for example, access to high quality and low cost food, the morbidity from nutrition-related chronic disease such as diabetes may decrease. Local retail of interest to residents will increase physical activity and could help maintain mental capabilities. Matching retail to local unmet needs and preference is also consistent with business success for retailers.

Alternatively, some retail uses may be adverse to community health. Alcohol outlets are associated with violent assaults. Fast food establishment tend to lead to low quality nutrition choices.

Evidence of Health Impacts

Consumption of healthy foods, like fruits and vegetables, correlates with access and proximity to supermarkets for African Americans [K. Morland et al., American Journal of Public Health. 2002 11:1761-1767]. The same study reported that full-service restaurants are also associated with better diet, while there is little association between fast-food restaurants and consumption of health food.

Additionally, rates of assault are correlated to the density of liquor stores in an area [PJ Gruenewald et al., Addiction. 2006: 101:666-677].

Studies Necessary to Evaluate the Potential Health Impacts

We recommend that EBALDC collect information about the retail and services that would be used and preferred by current and expected residents.

Recommendations for Design Mitigations

We believe that the developer should commit to providing retail and services that would be of benefit to the community. We therefore recommend that EBALDC:

1. Survey current neighbors to identify needs and wishes for additional retail, as current neighbors do not feel like they have been consulted with regard to retail usage;
2. Convene a neighborhood council composed of residents, retailers and public safety officers to create a plan for the retail space;
3. Set up meetings with local groups (e.g. churches and PTAs at schools) to discuss retail needs and wishes;
4. Provide community members with results of the past survey of residents regarding retail uses;
5. Follow the recommendations above with regard to safety.

In closing, we would like to thank you again for your participation in and cooperation with our HIA. We believe that EBALDC is interested in preserving the health of the future residents of the senior housing you are proposing to build, and we are glad to support you in achieving that goal.

Sincerely,

Margaret Gordon, West Oakland Environmental Indicators Project and West Oakland
Toxic Reduction Collaborative
Jonathan Heller, Human Impact Partners
Wendy Alfsen, BayPEDS (Bay Area walk advocates)
Megan Gaydos
Al Jones
Andy Katz, Breathe California
Ray Kidd, West Oakland Neighbors
Steve Lowe, West Oakland Commerce Association, West Oakland Toxics Reduction
Collaborative, and West Oakland Project Area Committee

List of HIA meeting participants:

Three meetings were held to discuss HIA and specifically the JLG phase 2 project. The dates of the meetings were July 19, August 2, and August 21. Below is an alphabetical list of people who attended at least one of those meetings. **Please note:** participation in these meetings does not imply that the participant endorses this letter.

Wafaa Aborashad
Wendy Alfsen
Rajiv Bhatia
Olympia Catillo
Devilla Ervin
Karoleen Feng
Henry Fullmore
Frank Gallo
Megan Gaydos
Duane Goodson
Margaret Gordon, WOEIP
Jonathan Heller, HIP
Mia Henderson-Bonilla
Karen Henry
Robyn Hodges
Al Jones
Bobby Jones
Andy Katz
Elaine Keen
Ray Kidd
Chris Lepe
Steve Lowe
Vanessa Moses
Meena Palaniappan
Swati Prakash
Robert Rayburn
Wilson Riles
Carmen Voilich