Traffic Causes Death and Disease in San Francisco Neighborhood

By Charlie Sciammas, Tom Rivard, Megan Wier, Edmund Seto, and Rajiv Bhatia

There is an environmental and health crisis brewing in the inner city and working class barrios of the San Francisco Bay Area. Their residents—primarily working class communities of color and immigrants—are dealing with the health impacts of heavy local and regional traffic that has been disproportionately channeled through their neighborhoods. Thanks to the transportation planning decisions made over the last generation, families looking for housing are often faced with the “choice” of an affordable but unhealthy community vs. a healthy but unaffordable neighborhood.

A Community Overwhelmed by Traffic

Southeastern San Francisco’s Excelsior District is a vibrant, working class community, home to many families of color and immigrants. It is also a community cradled by Highway 280 and the large, busy thoroughfares of Alemany Boulevard, Mission Street, and San Jose Avenue. So, there is a constant flow of traffic—particularly fast-moving trucks and buses on residential streets.

Concerned about the health impacts of the inordinately heavy traffic with its concomitant air pollution, noise, and safety hazards on the largely immigrant and working class communities of the area, PODER (People Organizing to Demand Environmental and Economic Rights), along with researchers from the San Francisco Department of Public Health (SFDPH) and the University of California Berkeley School of Public Health (UCB), developed a community-based Health Impact Assessment (HIA).1

PODER, community residents, and allies conducted door-to-door surveys in Spanish, English, and Chinese; counted traffic on street corners; took pictures of the neighborhood; and interviewed local residents to gather first-hand experiences and document the voices and ideas of the community within the HIA. The participatory approach brought together people of all ages and immigrant backgrounds to share their knowledge and experiences.

SFDPH helped to assess local air quality and monitor air and noise levels; and to model air quality and noise exposures based on community traffic counts. PODER also worked with students from a UCB Environmental Justice class to evaluate the walking environment and reviewed historical documents on the construction of Highway 280. Finally, they compiled and analyzed publicly available community health data, including death, hospitalization, and traffic-related injury data and demographics from the United States Census.

Traffic: An Environmental Justice Concern

Disturbingly, more people—particularly children—are living closer to the freeway than in the past. And a historical analysis of census data reveals that the freeway has become a “color line” through the community, with the racial composition of communities on either side notably different. Also, more people of color live in the area since the freeway was built.

Traffic permeates the home lives of the people in the study area. Residents report seeing, feeling, hearing, and smelling traffic and its negative by-products on a regular basis. They smell traffic exhaust on the sidewalk, at the bus stop, and even in their homes; their sleep is disturbed by traffic noise; and they worry about speeding cars and trucks on residential streets and the safety of children at play. These community experiences were also reflected in the air quality and noise modeling and measurement. The combination of intense freeway traffic coupled with
focused local diesel truck and bus traffic creates neighborhood “hot spots” that exceed SFDPH’s recommended action levels for roadway exhaust exposures.

The Excelsior neighborhood had the highest overall number of asthma hospitalizations of all San Francisco zip codes from 2001 to 2006. Furthermore, ischemic heart disease, stroke, lung cancer, and lung disease, all of which have an increased risk from long-term exposure to air pollution and noise, top the neighborhood list of illnesses and causes of death. Traffic collisions also are among the top 10 causes of death and injury. (For a detailed summary of these and additional project findings, visit www.podersf.org).

Educating the Community

Informed by local knowledge and the HIA, PODER and community members used various methods to share the findings within the community. PODER leaders wrote and performed a skit about how traffic pollution—especially from diesel trucks and buses—affects community health. Many workshops and trainings were held for community residents, and popular education materials, including a comic strip, were created. PODER also created a folleto, or pamphlet, which documents the findings of the HIA and celebrates the community’s unsung heroes who live on the frontlines of heavy local and regional traffic.

PODER worked closely with the Excelsior community to advocate for the San Francisco Municipal Transportation Agency to:
- prioritize hybrid electric buses in communities most impacted by traffic-related pollution;
- minimize truck traffic on streets in front of homes, schools, playgrounds, and other sensitive areas; and
- establish a network of truck routes (through a participatory process) to minimize the health impacts on surrounding residential neighborhoods, while facilitating the efficient flow of truck traffic.

PODER leaders presented the problems, along with the analysis and suggested solutions to decision makers at the Municipal Transportation Agency, which has committed to creating operations protocols to deploy hybrid electric vehicles on lines serving southeast San Francisco. Simultaneously, PODER is also working with the San Francisco Board of Supervisors to address the problem of concentrated traffic pollution from diesel trucks passing through the heart of the neighborhood.

The Lessons of Excelsior

The Excelsior study is remarkable for its collaborative, community-based approach to assessing the health impacts of traffic on a residential neighborhood. It draws on community members’ expertise and experiences in their local environment and combines it with the scientific knowledge and research tools made available by local universities and the city’s public health department—to generate solid evidence that can inform policy makers about the health consequences of their decisions. With this experience behind us, we look forward to a future in which the impacts of transportation policies and plans on environmental justice and community health are routinely considered and mitigated.

Endnotes
2. San Francisco asthma hospitalization and emergency room data by resident zip code obtained by request from California Breathing, a program in the California Department of Public Health’s Environmental Health Investigations Branch. Additional information on asthma data can be accessed at: http://www.californiabreathing.org/index.php?option=com_content&task=view&id=698&Itemid=270.

Charlie Sciammas works with PODER (People Organizing to Demand Environmental & Economic Rights); Tom Rivard, Megan Wier, and Rajiv Bhatia work with the San Francisco Department of Public Health; and Edmund Seto works with the University of California Berkeley, School of Public Health.
First published as a joint project of the Urban Habitat Program and the California Rural Legal Assistance Foundation, RP&E is now published twice annually by Urban Habitat and is dedicated to exploring the intersection of race, class, and environmental and social justice.

Don’t miss any of our passionate, in-depth discussions of important social topics!

Support RP&E:
subscribe today!

Use the form below or order online:
www.urbanhabitat.org/subscribe

Yes! I want an annual subscription to Race, Poverty & the Environment.
Sent free of charge to grassroots groups upon request.

☐ $20 (Individuals)  ☐ $40 (Institutions)

Yes! I want to support the advancement of social, economic, and environmental justice in the Bay Area and beyond.
I want to support Urban Habitat with a tax-deductible donation of:
☐ $25 ☐ $50 ☐ $100 ☐ $500 ☐ $1,000 ☐ Other $________

Name: ____________________________________________
Organization: ____________________________________________
Address: ____________________________________________
State: _____ Zip: ________ Email: ____________________________

☐ A check is enclosed  ☐ Please charge my Visa/MasterCard
Visa/MC Number: _________________________ Exp. Date: _____
(Please include the 3-4 digit card verification number found on the back of most credit cards.)

Signature: ___________________________________________

Please make checks payable to Urban Habitat. Mail this form to 436 14th St., #1205, Oakland, CA 94612 (510) 839-9609 Fax: (510) 839-9610