

HOPE VI to HOPE SF San Francisco Public Housing Redevelopment

A Health Impact Assessment



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Cover photo

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Executive Summary

Affordable quality housing is an important determinant of health. Homes provide shelter, safety, and a place to rest, belong, and to be with family and friends. Our lives are centered on our home and neighborhood.

Poor housing is associated with poor health. Substandard and poorly maintained housing is associated with injury, poor mental health, toxic exposures, and chronic disease. It is often easy to see the tell-tale signs of poor housing, such as overcrowding, insect and rodent infestation, mold, and the presence of old peeling lead-based paint. Other aspects of unhealthy housing are not so easily seen, but are still very much felt. Fear of crime and violence in and around one's home, stress of not being able to make housing payments, and the feeling of being socially isolated from one's community are all unhealthy.

Housing quality depends on neighborhood quality. A neighborhood can impact health through the availability of goods, services, transportation options, and opportunities for exercise and a healthy diet. Environmental hazards in the neighborhood can also have an adverse impact on health.

What is HOPE VI?

Housing Opportunities for People Everywhere, or HOPE VI, was a federal Housing and Urban Development initiative introduced in 1993 aimed at addressing a large inventory of severely distressed public housing units in the U.S. The program attempted to fundamentally transform public housing by both physically revitalizing properties and also changing the character of low-income housing communities and services, through changes in housing design, management, and community services. The HOPE VI program helped fund five public housing revitalization projects in San Francisco.

The Public Housing Authority in San Francisco (SFHA) serves an important role in improving health of the city's residents by providing access to affordable housing to low income families, the elderly, and persons with disabilities. Through federal HOPE VI funding, SFHA has redeveloped five seriously distressed housing sites over the past 12 years. Although HOPE VI funds have largely dried up, the SFHA is embarking on a new chapter of public housing redevelopment. A new HOPE SF process aims to redevelop other distressed public housing sites, increasing affordable housing and ownership opportunities, and improve the health of existing public housing residents and the neighboring communities.

To inform the new HOPE SF redevelopment process, we have conducted a Health Impact Assessment (HIA) of public housing redevelopment in San Francisco. Our goal was to explore both the positive and negative impacts of past HOPE VI redevelopment at two sites, Bernal Dwellings and North Beach Place, to understand their current health needs, while at the same time identifying opportunities to improve health in the HOPE SF redevelopment process.

What is Health Impact Assessment?

Health Impact Assessment (HIA) is a process used to evaluate the potential effects of a policy or development plan on the health of a population. The goal of a HIA is to inform decision-making through the systematic consideration of health.

An HIA tries to consider the best available evidence for decision making, which may come from stakeholders, the scientific literature, and quantitative and qualitative analyses of primary and secondary data.

The steps of an HIA include:

- Screening
- Scoping
- Assessment
- Reporting
- Monitoring & Evaluation

Our HIA analysis consisted of a review of the literature on public housing and health, conducting surveys and interviews with housing residents, management, and key individuals in the redevelopment process, and mapping neighborhood-level data for the two housing sites.

Based on guidance from public housing residents our assessment considered the following topics:

- Healthy Housing and Environmental Health
- Displacement
- Public Participation and Social Cohesion
- Youth Programs and Services
- Healthy Eating and Active Living
- Crime and Safety

Our findings of HOPE VI redevelopment indicate that:

Healthy Housing and Environmental Health

- Housing conditions improved, exposures to environmental hazards were reduced, and satisfaction with public housing improved.
- Despite these improvements, there remain ongoing challenges to housing maintenance that affect health, which need to be addressed by housing management.
- The state of health of current public housing residents is poor. There remain high rates of chronic diseases such as asthma, and chronic health conditions such as overweight and obesity. Stress was very high at both sites surveyed. Cardiovascular risk factors such as high blood pressure and high cholesterol were reported at North Beach Place. 1 out of 6 respondents to our survey reported combinations of 3 or more poor health conditions.

Displacement

- Many current residents were newly introduced after redevelopment, e.g., a majority of the residents who lived in the housing developments did not return after redevelopment.
- During redevelopment, social ties were stressed because families may have been relocated throughout the Bay Area.
- Many people may not have been able to return because fewer housing units were available, people had established new lives in other areas, or people did not meet re-entry criteria.

Social Cohesion

- Both sites analyzed have many potential physical assets for social interaction, most notably the community centers, which provide a variety of programming and services that can bring residents together.
- Displacement from redevelopment has negatively impacted social networks.
- Redevelopment has been accompanied by an increase in diversity in public housing. Some noted that this has come at the expense of African Americans not being able to return to or get into public housing. Yet, decreasing residential and economic segregation may have health gains potentially by reducing racism, increasing residents capacity to gain resources, and decrease crime.
- Resident volunteerism was reportedly very high. However, the lack of an ongoing, well-supported tenant governing body may contribute to stress and to discontent about housing management.

Crime and Safety

- Crime and safety were priority issues among residents.
- Some considerations of safety were made in the HOPE VI redevelopment process, and generally resident survey responses suggest that crime and safety have improved. However, at Bernal there remains fear of gang-related activity on one hand and police harassment on the other.
- The on-site community centers serve an important role as safe havens against crime.
- At both sites, there was concern that management's perspective on crime largely focused on eviction, which is a cause of great stress among residents.

Youth Programs and Services

- On-site community centers exist at both sites, and serve an important role in providing programs and services to youth, promoting social cohesion within the complex, and keeping youth out of trouble.
- Programs and services are perceived to have improved with redevelopment.
- At North Beach, there is a need for more services, better outreach, and better use of space.

Healthy Eating and Active Living

- Both sites benefited from redevelopment through the creation of dedicated space for community kitchen and food pantry, though in some cases space for physical activity is limited.
- North Beach Place benefited from mixed-use redevelopment that included retail and a grocery store, however suffers from strict management rules that restrict physical activity.
- Bernal Dwellings has community center that organizes healthy snacks, but the park across the street is underutilized.

“I get the idea of what they were trying to accomplish – mixing different incomes and family types is a good idea. But I would say don’t forget the mission of public housing. Don’t exclude low-income folks because of your new concepts”

Throughout our analyses, we found marked differences between Bernal Dwellings and North Beach Place. Many of these differences are driven by the differences in the redeveloped housing, the demographics of the sites, as well as the surrounding neighborhood conditions.

We offer the following recommendations to improve health at the HOPE VI sites:

Recommendations concerning Healthy Housing and Environmental Health

- Coordinate between the Department of Public Health and Housing Authority to monitor and address chronic health conditions of public housing residents, including possible outreach to health clinics to provide services to address health disparities.
- Explore specific public health programming (e.g., smoking cessation, healthy eating and active living, stress management) at public housing complexes
- Prompt maintenance of identified environmental health issues.

Recommendations concerning Displacement

- Provide education on housing options during redevelopment relocation.
- Provide comprehensive support for families undergoing involuntary relocation.
- Provide effective case management, particularly to vulnerable populations.
- Connect relocators to culturally- and age-appropriate institutions in their new neighborhoods, and provide coping services.

Recommendations concerning Social Cohesion

- Increase support for, and improve awareness of, programs and services offered by on-site community centers.
- Empower resident access and use of community spaces.
- Improve tenants’ communication with management, including increasing participation in tenant’s associations.
- Improve safety to enable residents to feel safe congregating and interacting in public space.
- Involve residents in the review of rules with management.
- Explore entrepreneurship opportunities for residents to fill vacancies in mixed-use public housing redevelopment.

Recommendations concerning Crime and Safety

- Ensure funding for on-site security.
- Management should maintain property to ensure good lighting, safety, removal of graffiti, and signs of violence.
- Police and residents should work together to resolve concerns over police harassment.
- Residents and management should work with police on gang and violence reduction activities.
- Increase support for, and improve awareness of programs and services offered by on-site community centers that act as safe havens from crime.
- Explore alternative strategies to eviction for hard-to-house residents.

Recommendations concerning Youth Programs and Services

- Fully fund Community and Supportive Services, which should focus on residents' needs.
- Hire case managers/advocates.
- Extend community center hours.
- Develop relationships with local organizations, schools, and afterschool programs, to support teen programming.
- Foster cross-cultural relationship building.
- Establish permanent food pantry/subsidy program.
- Routinely monitor and assess resident needs for changing programs and services.

Recommendations concerning Healthy Eating and Active Living

- Establish funding to implement healthy eating and active living programming at the on-site community center.
- Work with park and recreation to reopen the recreation center at, and improve lighting across the street from Bernal Dwellings.
- Allow for permits to block off of streets at Bernal Dwellings so that residents can use space for organized activities.
- Work with police to improve neighborhood safety.
- Improve community center programming for all ages and cultural backgrounds.
- Residents should work with management on appropriate options for physical activity within the housing complex.

Although the above recommendations are focused on improving the health of HOPE VI residents they are also very relevant to new HOPE SF redevelopment. The HOPE SF guiding vision is to:

Rebuild our most distressed public housing sites, while increasing affordable housing and ownership opportunities, and improving the quality of life for existing residents and the surrounding communities.

The HOPE SF principles are to:

1. Ensure no loss of public housing
2. Create an Economically Integrated Community
3. Maximize the Creation of New Affordable Housing
4. Involve Residents in the Highest Levels of Participaton in Entire Project
5. Provide Economic Opportunities Through the Rebuilding Process
6. Integrate Process with Neighborhood Improvement Plans
7. Create Environmentally Sustainable and Accessible Communities
8. Build a Strong Sense of Community

In meeting these principles there should be explicit consideration of how to improve the health of residents through the redevelopment process. In many cases, meeting these principles will have co-benefits to health. In some cases, careful consideration and open, transparent, and frank discourse of healthy objectives may lead to the identification of opportunities to improve health at HOPE SF sites.

In addition to the findings/recommendations we have identified above for HOPE VI sites, we offer the following recommendations for ongoing HOPE SF redevelopment:

- Enable broad stakeholder participation in explicit discussions of how to improve health, and address existing health disparities.
- Employ design elements to improve safety – a priority concern among public housing residents. Safety has numerous health implications on fear and stress, social cohesion, and active living.
- Ensure that police are engaged in the redevelopment process, and that long-term strategies to reduce violence and improve safety are considered.
- Use high-quality and healthy building materials, and consider long-term maintenance issues.
- Have an appreciation for neighborhood differences, as they have implications on exposures to environmental hazards such as traffic-health impacts, cultural and social-economic issues that affect social cohesion, crime that affects how policing is carried out and perceived, and the degree to which mixed-income and mixed-use redevelopment might benefit residents.
- Consider housing management practices and policies that will ensure upkeep of quality housing, safety, transparency, and promote active dialog with residents, and empower residents to play a larger role in their communities.
- Consider how tenant’s associations will be structured and how residents will be able to voice housing concerns to management.

- Redevelop in stages, and minimize the disruption associated with relocation, even if all relocation occurs on-site. If redeveloping in stages, consider and mitigate exposures to environmental hazards for remaining residents during the construction phase.
- Be mindful of the diversity of public housing residents, and provide educational information and seek participation from residents of different ages, cultures, races, ethnicities, and who speak different languages.
- Ensure that programs and services are an integral component of redevelopment. Consider space, accessibility, staffing and other resource requirements as part of the redevelopment process so that there are adequate provisions for future programs and services.
- Ensure adequate space, programming, and access to healthy foods and opportunities for active living. Consider community kitchens, gardens, space for food pantry, greenspace, play areas, access to public transportation, as well as low-rise development and well-lit spaces that encourage use of stairs.
- Look for healthy opportunities through mixed income redevelopment. Although our sample was small, and we were only able to analyze income levels found in our two study sites, our findings suggest that mixed income redevelopment may introduce residents who are generally more satisfied with their overall health into the community. Additionally, higher income survey respondents tend to report high community participation rates.
- Above all, listen to residents. Public housing residents do not have the luxury of housing mobility, and therefore must make the most out of the housing they are provided. Because they will live there, they should have a large say in the redevelopment of their future homes.

Introduction

In 2008, the U.S. Centers for Disease Control and Prevention funded the UC Berkeley Health Impact Group (UCBHIG) under the University of California Berkeley's Prevention Research Center to provide technical assistance to groups conducting Health Impact Assessment (HIA). This report documents the findings of a HIA of how public housing redevelopment in San Francisco has affected the health of public housing residents with the aim of informing future public housing redevelopment.

This introduction will frame the HIA by outlining the importance of housing (particularly low-income housing) on health, the history of public housing in the United States, and the genesis of the federal HOPE VI public housing redevelopment and its implementation in San Francisco. This introduction will also describe Health Impact Assessment as conducted for this project.

The Importance of Housing on Health

The availability and quality of housing is an important determinant of health. We look to our homes to provide shelter, safety, and a place to rest, belong, and to be with family and friends. While there are many health benefits associated with quality housing, there are also many problems associated with poor housing. Increasing evidence suggests that substandard or unaffordable housing is associated with injury, poor mental health, lead poisoning, and chronic diseases such as asthma. It is often easy to see the tell-tale signs of poor housing, such as overcrowding, insect and rodent infestation, mold, and the presence of old peeling lead-based paint. Other aspects of unhealthy housing are not so easily seen, but are still very much felt. Fear of crime and violence in and around one's home, stress of not being able to afford housing, and the feeling of being socially isolated from one's community are all unhealthy. Housing quality also depends on the surrounding neighborhood. A neighborhood can impact health through the availability of goods, services, transportation options, and opportunities for exercise and a healthy diet, and whether environment hazards exist.

Low income populations are especially vulnerable to poor housing conditions. Public housing programs and other affordable housing opportunities act as a "safety net" for low income populations (Fertig and Reingold 2007). This safety net catches low income individuals and families from falling into poorest of health conditions that are associated with homelessness. Homelessness is a serious and growing problem in the United States, with an estimated 2.3 to 3.5 million Americans becoming homeless each year (Burt M, Aron L et al. 2001). Homeless people have many of the same health problems as people with homes, but at rates three to six times greater than housed people (Cheung and Hwang 2004). Evidence from San Francisco is especially disheartening – from 1990 to 2003 surveys of the city's homeless population found that the duration of time spent homelessness increased from 12 to 40 months, along with

increased hospital emergency room visits, hospital admissions, and chronic health conditions (Hahn, Kushel et al. 2006).

While many low income populations may not become homeless, some may be forced to live in unsafe substandard housing, while others may live in decent housing, but pay a large proportion of their household income for the housing. When families pay a lot for housing, they may be forced to sacrifice other important needs, such as those for food, clothing, and health care (Bhatia and Guzman 2004). Still others may be able to afford housing, but only by working additional jobs and/or longer hours, which may adversely affect time for rest, family, exercise, and healthy eating. The issue of balancing essential needs on a limited income is especially problematic in San Francisco, where only 7.3% of households currently earn enough to afford the median sale price of housing, a 2-bedroom apartment is only affordable to those who make 90% of the average family's median income of \$86,100 (National Low Income Housing Coalition ; City and County of San Francisco 2009).

Addressing the Need for Affordable Housing through Public Housing Programs

Subsidized housing through the public housing programs may prevent the adverse health impacts of homelessness and unaffordable housing for low-income populations. Housing subsidies can make a greater proportion of income available for health services, medicine, and healthier behavioral choices (e.g., purchasing more nutritious foods). Moreover, comprehensive public housing programs may provide ready access to important social services that benefit health (e.g., youth services, food pantry) for low income populations.

The Public Housing Authority in San Francisco (SFHA) serves an important role in improving health of the city's residents by providing access to affordable housing to low income families, the elderly, and persons with disabilities. Housing programs like San Francisco's originated from the 1937 U.S. Housing Act, which created the U.S. Housing Administration, and required the construction of public housing units (Fertig and Reingold 2007). This Act was originally rooted in public health. Its goals were to promote the general welfare of the nation by solving the problem of unsafe housing conditions and the acute shortage of decent and safe dwellings for low-income families. San Francisco's, is only one of approximately 3,300 housing authorities that provides housing to approximately 1.2 million households across the U.S. (San Francisco Housing Authority).

The SFHA is the 17th largest in the nation, and the oldest in California, dating to 1940 (San Francisco Housing Authority). The SFHA currently oversees 53 housing sites with a total of 6,451 public housing units. A diverse population of close to 12,000 people live in SF public housing. The majority of residents are African American or Asian/Pacific Islander. Yet, SFHA cannot meet all of the city's demand for affordable housing – approximately 29,000 households are on the waiting list for a public housing unit. The SFHA programs are supported financially by the U.S. Department of Housing and Urban Development (HUD) and the rents paid by

residents. SF public housing residents pay approximately 30% of their income for rent, which in 2007 averaged only \$287 per month.

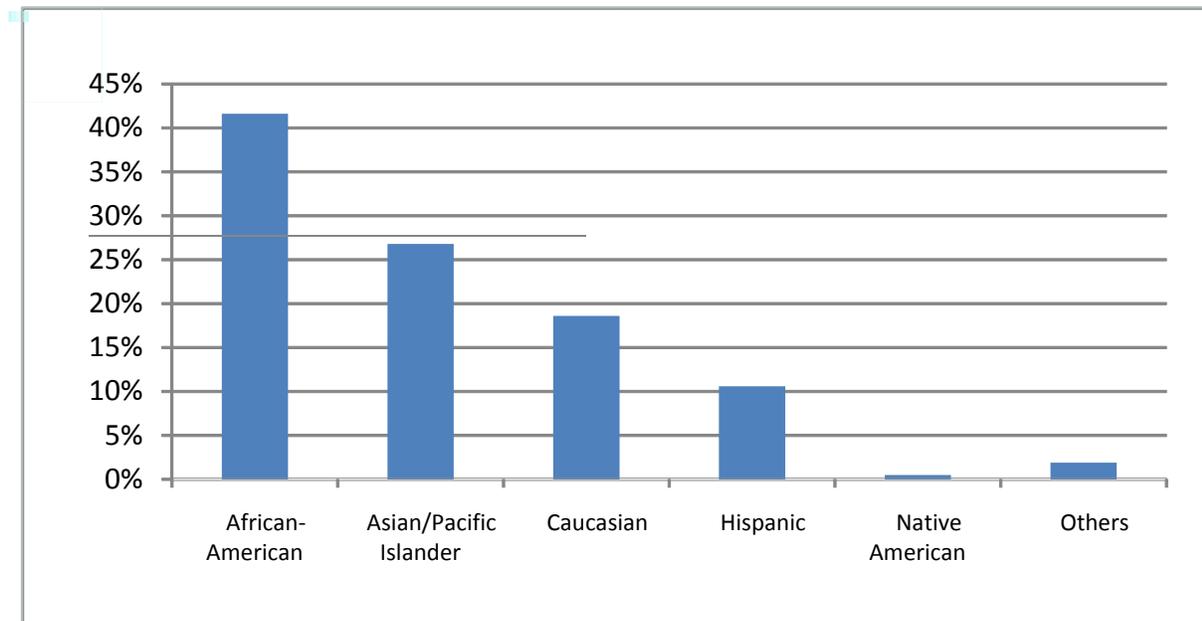


Figure 2. Tenant Demographics of SF Public Housing
http://www.sfha.org/residents/tenant_demographics.htm

A Historical Public Housing Health Crisis

Over two decades of research has documented the health conditions of public housing residents. These studies have clearly shown increased levels of self-reported poor health, asthma, hypertension, diabetes, obesity, depression, smoking, physical activity, exposures to poor indoor air quality and pests, and poor access to healthcare (Popkin, Katz et al. 2004; Digenis-Bury, Brooks et al. 2008). As an example, a study published in 2008 found that Boston public housing residents were more than four times as likely to have fair or poor health than other city residents (Digenis-Bury, Brooks et al. 2008). Moreover, public housing residents were roughly 2-3 times as likely to have hypertension, asthma, diabetes, disabilities, dental problems, and smoking, 1-2 times as likely to not get enough physical activity and be obese. Stark social factors separate public housing residents from other city residents, including significantly lower levels of education, employment, and household income. Indeed, the magnitude of poor health among public housing residents is staggering: in the Boston study, close to one third of public housing residents reported fair to poor health, had hypertension, smoked, and/or were obese; close to 20% had asthma and/or signs of depression.

Table 1. Health of public housing residents to other city residents in Boston (Digenis-Bury, Brooks et al. 2008)

	Public Housing Residents (n = 393)	Other City Residents (n = 2526)	Crude Prevalence Odds Ratio
	%	%	Ratio
Education			
Less than high school	23.5	5.2	
College graduate	14	54	
Employment			
Unemployed	13.7	5.9	
Annual household income			
<\$10,000	25.9	4.5	
Health Status			
Fair or poor health status	32.9	9.3	4.57
Hypertension (ever diagnosed)	36	17.4	2.57
Asthma (current)	19.2	9	2.46
Diabetes (ever diagnosed)	13.8	5.3	3.35
Obesity	31	18	1.91
Disabled for ≥ 1 year	33.9	17.8	2.38
Missing ≥ 6 teeth	24.9	11.8	2.6
Felt sad, blue, or depressed ≥ 15 days in past month	19.6	6.5	3.12
Teeth not cleaned in > 2 years	28	15.2	2.18
Smoker (current)	34.4	20.6	1.99
Insufficient physical activity	61.8	53.1	1.43

These poor social and health factors mirrored the failing physical and neighborhood conditions of many of the public housing projects around the nation (Popkin, Katz et al. 2004; Peterson 2005). Many public housing buildings were constructed as plain high-rise buildings in an effort to make the most out of federal housing funds. These high-density high-rises became synonymous with all that was wrong about public housing: racial segregation and high concentrations of poverty, unemployment, crime, drugs, and inadequate services, policing, schools, and sanitation. Nationwide, poor management and inadequate federal funding resulted in lack of maintenance for public housing. Because maintenance was funded in part by low-income tenant rents, poor maintenance issues arose. Poor maintenance was exacerbated by Federal Housing and Urban Development (HUD) practices of penalizing local housing authorities with poor maintenance records by withholding funds, which could have been used for repair costs. Hence, by 1992, when the National Commission on Severely Distressed Public Housing conducted an 18-month review and analysis, they estimated that 86,000 units (approximately 6% of the public housing stock) were severely distressed. Two outcomes from this study have resulted: 1) the necessity to close many uninhabitable units at times when the waiting lists for guaranteed affordable housing was swelling and 2) the need to improve the serious health conditions associated with residents living in substandard public housing units.

Finding Hope through Revitalization

Faced with poor social and health conditions and a large inventory of severely distressed housing units, a major federal initiative was introduced in 1993 to fundamentally transform public housing by physically revitalizing properties and changing the character of low-income housing communities and services (Popkin, Katz et al. 2004). The program was called Housing Opportunities for People Everywhere, or HOPE VI. Under the program, local housing authorities would apply for federal funds to reconstruct housing projects, fund section 8 vouchers (so that displaced residents could find subsidized housing in other places during redevelopment), and create a new practice of housing management. Moreover, 20% of the \$300 million in HOPE VI federal funds were set aside for community building initiatives, such as job training, day care, and youth services.

Central to the HOPE VI program was the idea of poverty deconcentration (Popkin, Katz et al. 2004). HOPE VI encouraged the replacement of low-income housing projects with mixed-income communities. This line of thinking was largely motivated by social experiments like the Moving to Opportunity (MTO) studies, which had shown short-term benefits associated with moving low income populations into low-poverty areas. The HOPE VI program allowed for poverty deconcentration by removing previous laws that had required one-to-one replacement of low-income housing units during redevelopment. This allowed some flexibility to create new mixed-income and mixed-use communities. HOPE VI also removed the requirement that local housing authorities preferentially housing the poorest families, which made way for mixed-income redevelopment.

With HOPE VI there was a new emphasis on improving housing design to get away from the high-rise, high density, super-block, lowest-cost model that had shaped public housing design for decades. HOPE VI largely coincided with the emergence of New Urbanism design principles, which emphasized traditional neighborhood patterns of houses facing streets, grids of streets, mixed housing types, and mixtures of people, shopping, and parks (Newman 1996). There was also an emphasis on creating housing designs that had “defensible space” – communities designed so that residents had greater control over their exterior home space.

HOPE VI in San Francisco

The SFHA was highly successful in obtaining HUD HOPE VI funding. The SFHA collaborated with private developers and State and City agencies to complete HOPE VI revitalization at the following sites (San Francisco Housing Authority):

- Valencia Gardens (2006) \$23.2 M HOPE VI Funds and \$50.7 M other Funds \$74 M
- North Beach (2004) \$23.3 M HOPE VI Funds and \$82.8 M other Funds \$106.1 M
- Plaza East (2002) \$20.2 M in HOPE VI Funds and \$23 M other Funds \$43.2 M
- Bernal Dwellings (2001) \$29.8 M HOPE VI Funds and \$11.9 M other Funds \$41.8 M
- Hayes Valley (1998/1999) \$22.1 M HOPE VI Funds and \$20.4 M other Funds \$42.5 M

As indicated above, in all cases in San Francisco, the redevelopments leveraged federal funding and combined private funding. Moreover, private-public development partnerships were created for the projects (redevelopment agreements can be found on the SFHA website). Prior to HOPE VI, public housing agencies had no capacity to partner in such ways with private agencies to create innovative financing for housing project renovation.

The design of each of the projects was unique. In total the San Francisco HOPE VI redevelopments resulted in 1,149 units of new public and affordable housing with 2,607 bedrooms. At most sites the availability of public housing increased, but in some of the earlier developments, the number of available public housing units was reduced.

A key difference between San Francisco's HOPE VI projects and other HOPE VI projects across the country was the absence of market-rate housing, and lack of ownership opportunities. Yet, SF's HOPE VI projects still have a mix of incomes, with varying proportions of public housing (0-30% of Area Median Income, AMI), Section 8 (0-50% AMI), and low income tax credit families.

What was clear from the redevelopments was a departure from the blighted monolithic public housing high-rise look of the past. The new HOPE VI housing projects looked new, and like they belonged in the community. Moreover, the management of the projects changed drastically, shifting away from the housing authority to private management companies in an effort to upkeep the quality of the housing.



Figure 3. (left) Bernal Dwellings and (right) North Beach Place

There have been mixed reactions to the nationwide HOPE VI program. A major evaluation of the program “A Decade of HOPE VI: Research Findings and Policy Challenges” conducted by the Urban Institute in 2004 found many redevelopments resulted in not only prettier architectures, better sidewalk and street layouts, and more defensible space, but also lower densities. Some of the early anecdotal evidence suggested the properties were better maintained. However, there are major concerns about the time taken for redevelopment (in some cases more than a few years), displacement of population caused by the long redevelopment timelines, and the push towards fewer units and mixed-income housing. Rates of return of original residents back to HOPE VI sites vary considerably, but generally are below 50%, which raises serious questions about how relocations were handled (about a third received section 8 vouchers that could be accepted regionally, about a half were relocated to other public housing sites, and the

remainder left the public housing program), and whether this resulted in a major exodus away from the redeveloped sites and ensuing gentrification. Worse, in some cases, poor record-keeping may have prevented some of the original residents in reclaiming their spots in the HOPE VI housing (Peterson 2005). Moreover, new screening criteria for the redeveloped sites may have filtered out some residents from returning. Evidence suggests that on the average, original residents had moved to areas of lower poverty and crime, but it is unclear what economic hardships this has created, or how the disruption of social ties and social services has impacted health.

Currently, there is no clear evidence on how HOPE VI has affected the health of its original residents, and assesses the health of HOPE VI's new residents. Panel studies have considered the health of residents before HOPE VI redevelopment (Table 2) (Howell, Harris et al. 2005). They tell a similar and in some cases even more extreme story of health inequities as that presented in Table 1, and suggest that the HOPE VI sites may have been some of the worst public housing projects in the nation.

Table 2. Resident and housing conditions at HOPE VI sites before redevelopment compared to other U.S. assisted housing, U.S. poor, and U.S. non-poor.

	HOPE VI (before redevelopment)	US assisted housing	US poor	US non-poor
	%	%	%	%
Household income				
<\$10,000	67.10	36.00	74.70	0.70
Hardship				
worry that food would run out	50.10	52.60	44.90	13.30
Housing quality				
apartment cold for >24 hours	32.80	12.90	11.60	7.10
water leaks	41.50	14.20	10.80	9.30
toilet breakdowns	24.50	6.50	5.10	2.50
peeling paint	35.90	4.90	4.20	2.30
Health				
health is excellent or very good	37.70	35.30	48.70	66.80
asthma	21.80	16.30	15.20	10.90

Ongoing San Francisco Public Housing Redevelopment: HOPE SF and a Health Research Need

Funding for the federal HOPE VI program has largely dried up. However, this has not stopped progress of public housing programs in the U.S. In fact, numerous housing authorities around the U.S. are reinventing themselves to deal with the ongoing need for sustainable and healthy public housing assistance.

In San Francisco, HOPE SF is a new partnership between the Housing Authority and the Mayor's Office on Housing to rebuild public housing sites, increase affordable housing and ownership opportunities, and improve the health for existing public housing residents and the neighboring communities (San Francisco Housing Authority). The new program seeks to continue the theme

of mixed-income developments that leverage public-private financing partnerships to create new affordable and market-rate homes, as well as parks and other public amenities for residents and neighbors alike.

In 2007, Mayor Gavin Newsom and the San Francisco Board of Supervisors authorized \$95 million in local bond funding to launch the program. Currently, there are several sites being considered for the HOPE SF program, and some redevelopments are beginning to break ground. However, all aspects of redevelopment planning have not been finalized. Thus, there is a good opportunity for new community-based and multi-stakeholder participation to inform the ongoing redevelopment process. Already, multiple city agencies including the Department of Children, Youth, and Families, the Office of Economic and Workforce Development, the SF Unified School District, and the Department of Public Health, as well as various community groups are participating in the development of HOPE SF policy.

A New Approach: Health Impact Assessment

In an effort to identify and prioritize the broad health conditions of current HOPE VI residents, and to inform new HOPE SF policy in San Francisco, we conducted a Health Impact Assessment. Health Impact Assessment (HIA) is a process used to evaluate the potential effects that a policy, program or plan will have on the health of a population (Dannenberg, Bhatia et al. 2006). Through this process, we considered how redevelopment of public and affordable housing has either positively or negatively impacted residents' health. Our process relied upon active involvement by HOPE VI residents and the organizations that provide services to them to ensure that they help determine how their homes and communities may be improved to promote health. We used both qualitative and quantitative research methods including 1) discussions, interviews, and surveys of HOPE VI residents to better understand their health priorities and concerns and 2) data analysis using maps and city data to illustrate the community's assets and barriers to good health, such as access to healthy foods, jobs, and places to exercise and play, air quality, noise, and crime. Through this assessment we have attempted to identify and prioritize health issues and concerns of current HOPE VI residents, and proactively seek opportunities to solve these problems. Our approach is also forward-looking: we hope that our findings will inform future public housing redevelopment in San Francisco based on both the good and bad experiences learned from past redevelopments.

Research on public housing has demonstrated the importance of having a community voice in the process. The community-based HIA process we used is ideally suited to organizing and echoing these voices. Throughout the process (screening, scoping, analysis, reporting, and evaluation) we have attempted to obtain input from our community partners to assure that the broad range of health issues considered is relevant, our findings are sensible and represent different stakeholder viewpoints, and our recommendations are feasible.

It is important to note that HIA is a relatively new health policy practice in the United States. In many ways the practice is still being developed. In our approach we have tried to adhere to new guidelines for the best-practice of HIA in the United States (see Appendix).

Partnerships

The HIA was conducted as an informal partnership between researchers at the University of California, Berkeley and Human Impact Partners (HIP), San Francisco Department of Public Health, and Telegraph Hill and Mission Neighborhood Community Centers. We received input from residents, the San Francisco Housing Authority, housing management companies, and other stakeholders. Our intended audience was the San Francisco Mayor's Office of Housing, which is facilitating the planning process for new HOPE SF public housing redevelopment.

Funding

The HIA was funded by the U.S. Centers for Disease Control, as part of a grant to the University of California, Berkeley's Prevention Research Center to provide technical assistance to community groups wishing to engage in the practice of Health Impact Assessment.

Screening

Screening is the step in HIA where potential HIA partners determine whether or not an HIA should be conducted. In our initial Screening phase for this HIA we had identified public housing redevelopment as a timely issue requiring input on the local successes and failures of past public housing redevelopment. Previous research was identified that clearly documented the impact of public housing on health. Moreover, as public housing deals with low income and racially diverse populations, there was a potential impact on health inequities. Depending on the particular housing site, it was clear that different choices were made with respect to how redevelopment was carried out, which had an effect upon health, and that understanding how these choices impacted health may inform future redevelopment. Additional motivation to conduct the HIA also considered that there was sufficient interest from community centers to work with us, and that funding for the research team was available to work with our community partners. Above all, there was a clear need and openness to health-based evidence to influence the decision-making process at existing HOPE VI sites, and in the planning of HOPE SF.

Scoping

In the scoping phase, HIA partners decide on the scope of research for the HIA and how the HIA will be conducted and the findings reported. We chose two HOPE VI sites, Bernal Dwellings and North Beach Place, to conduct our HIA. This choice was largely based on interest from the on-site community centers (Mission Neighborhood Community Center for Bernal Dwellings and Telegraph Hill for North Beach Place). Over a course of informal interviews and discussions with our community partners, we identified the following scope of health issues:

- Healthy Housing and Environmental Health
- Displacement
- Public Participation and Social Cohesion
- Programming and Services
- Healthy Eating and Active Living
- Crime and Safety

Assessment

During the Assessment phase, researchers use the best evidence available to arrive at judgments about how health has changed as a result of the plan or policy being studied. In some cases evidence came from scientific literature reviews, with particular focus on research that has been conducted on the effects of HOPE VI redevelopment in other cities, the Movement to Opportunity studies, and broad literature on the linkages between housing and neighborhood environment, social factors, and health. There are limitations to this evidence. Research conducted in other parts of the country may not apply directly to San Francisco public housing residents. Hence, we also relied upon on local data through site visits, key informant interviews, and a comprehensive Health and Redevelopment resident survey. In the following sections we describe the health evidence that exists for each of the topics listed above as it relates to public housing and offer recommendations for how these may be addressed in the future. We note at this outset, however, that many of these issues are problems that have plagued public housing and low-income populations for years, and that finding sustainable solutions to these issues will take considerable more research and effort than what is possible in this HIA.

In total 25 key informant interviews were conducted, we met with community partners at least once a month over the course of the year-long project. 149 residents completed the Health and Redevelopment survey, which was administered in three languages (English, Chinese, and Spanish), and included over 100 questions aimed at elucidating the inter-relationships between each of our scoped topics. We recruited public housing residents for the survey using a convenience sample from those 18 years or older attending regular community events like the tenants meeting, food pantry, and using the community centers at both HOPE VI study sites. In addition, we attempted to interview other non-resident stakeholders for a balanced perspective on the health issues listed above. We recognize the limitations of our interviews and surveys: only about a half of the residents we tried to recruit participated in our study, and given more time and personnel we would have liked to continue to reach out to more residents and stakeholders in San Francisco's HOPE VI process.

Table 3. Survey respondents

		Bernal Dwellings	North Beach Place
Total surveys		N=50	N=99
Present before redevelopment		N=48	N=96
	Yes	21 (56%)	22 (23%)
Sex		N=48	N=90
	Female	32 (67%)	64 (71%)
Race/Ethnicity		N=48	N=89
	Black/African American	21 (44%)	17 (19%)
	Latino/Hispanic	19 (40%)	10 (11%)
	Asian/Pacific Islander	3 (6%)	51 (57%)
	White	1 (2%)	4 (4%)
Incomes		N=38	N=72
	<\$5,000	11 (29%)	23 (32%)
	\$5,001 - \$10,000	11 (29%)	11 (15%)
	\$10,001-15,000	6 (16%)	12 (17%)
	15,000+	10 (26%)	26 (36%)

Some general limitations to our assessment were the lack of pre-redevelopment data to compare against our survey response. Hence, most findings related to changes since redevelopment were based on responses from the limited number of participants who were familiar with the conditions before redevelopment. Only 34% of those surveyed had lived in their housing complex before and after redevelopment. In Bernal, 56% had lived there before and after redevelopment, and in North Beach, only 23% had. While we did not purposely seek residents who were lived there before redevelopment, these rates are higher than those found in national tracking studies of public housing residents from HOPE VI redevelopment sites, in which only 14% - 19% had returned to newly remodeled HOPE VI sites (Buron et al., 2002).

Another potential limitation in our assessment may be the introduction of selection bias based on our recruitment in and around services related to the Centers (e.g., the food pantries) at each site. We were not allowed to recruit residents through door-to-door sampling, which would have provided a more representative sample. This bias may result in overestimates of use of the programs and services. Yet, we tried to even out this bias by also interviewing representatives that may have other viewpoints, such as the management companies, surrounding business, members of the larger community, and the police.

Our survey sample may also be biased by HOPE VI sites we've chosen, and therefore findings may not be generalizable to other sites. Additionally, our higher proportion of respondeants

at North Beach means that they race/ethnic representation of our sample may not be equal, not representative of all HOPE VI sites in San Francisco.

In a number of our assessment topics, we aim to link health-related behaviors with varying levels of opportunity to live a healthy lifestyle (physical and social environmental conditions created through redevelopment). Having an opportunity to live a healthy lifestyle does not always mean healthy behaviors will occur. For example, in the context of public housing redevelopment, creating physical spaces in which mixed income residents might interact with one another, does not mean such interactions will occur. But what it does do is create the possibility that it could.

Additional limitations include, for our neighborhood analyses, inability to use 2010 census data, which are not yet available. Hence, census items are largely outdated (1990 and 2000). Our spatial assessments are focused on circular buffers around the two study sites, and do not assess accessibility, quality, variability by neighborhood. With limited resources and a low sample size on our survey, we were not able to produce many cross-tabulations from our data, e.g., answers to survey by income level.

Reporting

The Reporting step of HIA involves how the results of the Assessment are communicated to stakeholders and decision makers. This report was drafted and reviewed by a variety of stakeholders. A draft of this report was shared with community partners, city and county stakeholders (Mayor's Office of Housing, San Francisco Housing Authority, county supervisors, the public health department, and the management companies at each housing site.

Additionally, a presentation of the results took place at each housing site inviting residents, community center staff, and management. One page summaries were prepared for community members as well as an oral presentation, and delivered in 2 community meetings. The purpose of this step of reporting and communication was to "ground truth" the results of the report and to solicit feedback from residents living in public housing about recommendations to mitigate any negative health impacts from redevelopment.

The final report will be distributed to all stakeholders as well as made available to not only local city and county decision-makers who have a say in the future of public housing redevelopment in San Francisco, but to national public housing advocates and housing/health experts. We will also distribute the report and recommendations to affordable housing builders.

Monitoring & Evaluation

The Monitoring step of HIA involves follow-up activity to track the outcomes of decisions and their implementation that result from the HIA's findings and recommendations. Evaluation of the HIA process and impacts may lead to improvements in the field of HIA and its practice. For this HIA we have decided to focus on the issue of evaluating our HIA process, rather than

monitoring of outcomes. This decision was made on the basis of our limited scope of time to conduct our HIA that does not allow for formal monitoring of longer-term outcomes. However, our evaluation plan includes an assessment of these factors:

1. To clearly identify the barriers to building community technical expertise and conducting HIA research, and to identify strategies to overcome those barriers.
2. To measure the participation in the HIA process by evaluating those who participated in the entire HIA and those that left the process early.
3. To evaluate the effectiveness of technical assistance provided during the HIA and whether participants feel they have the skills, resources and tools to conduct HIAs on their own.
4. To monitor/evaluate the short-term outcome of the HIA recommendations.

Our detailed Monitoring and Evaluation Plan is available upon request. We acknowledge that other evaluations are occurring for HOPE SF, and other tools, such as SF Department of Public Health's Healthy Development Measurement Tool (HDMT) will be used for ongoing monitoring and evaluation of public housing redevelopment.

Throughout this report, and particularly in the Executive Summary, we consider how our evidence aligns with design goals for new HOPE SF redevelopment. It is our hope that the broader stakeholder participation in the HOPE SF process, particularly involvement from residents and the Department of Public Health, and the evidence from this report will alleviate the need for detailed HIAs for future HOPE SF projects, but will naturally lead to explicit health-based decision-making.

References

- Bhatia, R. and C. Guzman (2004). The Case for Housing Impacts Assessment: The Human Health and Social Impacts of Inadequate Housing and Their Consideration in CEQA Policy and Practice. San Francisco, City and County of San Francisco, Department of Public Health, Occupational & Environmental Health Section, Program on Health, Equity & Sustainability.
- Buron L, Popkin S, Levy D, Harris L, Khadduri J. 2002. The HOPE VI resident tracking study: A snapshot of the current living situation of original residents from eight sites. US Dept of Housing and Urban Development.
- Burt M, Aron L, et al. (2001). Helping America's Homeless: Emergency Shelter or Affordable Housing? Washington DC, The Urban Institute Press.
- Cheung, A. M. and S. W. Hwang (2004). "Risk of death among homeless women: a cohort study and review of the literature." CMAJ **170**(8): 1243-1247.
- City and County of San Francisco. (2009). "CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL CODE PLANNING CODE." Retrieved August 15, 2009, from <http://www.municode.com/Resources/gateway.asp?pid=14139&sid=5>.
- Dannenber, A. L., R. Bhatia, et al. (2006). "Growing the Field of Health Impact Assessment in the United States: An Agenda for Research and Practice." **96**(2): 262-270.
- Digenis-Bury, E. C., D. R. Brooks, et al. (2008). "Use of a Population-Based Survey to Describe the Health of Boston Public Housing Residents." **98**(1): 85.
- Fertig, A. R. and D. A. Reingold (2007). "Public housing, health and health behaviors: is there a connection?" J Policy Anal Manage **26**(4): 831-859.
- Hahn, J. A., M. B. Kushel, et al. (2006). "BRIEF REPORT: the aging of the homeless population: fourteen-year trends in San Francisco." J Gen Intern Med **21**(7): 775-778.
- Howell, E., L. E. Harris, et al. (2005). "The health status of HOPE VI public housing residents." J Health Care Poor Underserved **16**(2): 273-285.
- National Low Income Housing Coalition. "Out of Reach 2003: America's Housing Wage Climbs." from <http://www.nlihc.org/oor2003/>.
- Newman, O. (1996). Creating Defensible Space. Washington, DC, U.S. Department of Housing and Urban Development, Office of Policy Development and Research,.
- Peterson, R. (2005). "HOPE VI in San Francisco " SPUR newsletter(March).
- Popkin, S. J., B. Katz, et al. (2004). DECADE OF HOPE VI: Research Findings and Policy Challenges, The Urban Institute, The Brookings Institution.
- San Francisco Housing Authority. from <http://www.sfha.org/>.

Current Health and Neighborhood Conditions

Questions for HIA

- *What is the state of current health at the two HOPE VI housing sites in our study?*
- *What are the neighborhood conditions at the sites that may impact health?*

Background

Here we present the current health status of the two HOPE VI sites, Bernal Dwellings and North Beach Place, as self-reported by the residents who completed our Health and Redevelopment survey. These health conditions reflect many factors that have the potential to influence health, including individual behaviors, as well as physical and social environmental factors, which include one's housing and neighborhood conditions.

While it is not possible to link redevelopment directly to these self-reported health conditions, it helps to “set the stage” for this HIA by allowing readers to understand the magnitude and nature of health issues at these two sites. Many of the health issues we asked about are chronic in nature, and would not be expected to disappear simply with newly redeveloped housing. However, in some cases, public housing policies and decisions can potentially alleviate the burden and exacerbation of these conditions.

Health extends beyond the traditional chronic health conditions reported in this chapter. Subsequent chapters describe in more detail equally important health considerations, such as satisfaction with housing conditions, programs and services for youth, perceptions of safety, and social cohesion.

In addition to describing the health status, we also report on the neighborhood conditions surrounding the two sites. We compare these with San Francisco as a whole, using 1990 and 2000 census data. Neighborhood characteristics were measured at one mile, one-half mile and one-quarter mile buffers around each housing site. These allow for comparisons of how neighborhood conditions may be changing at each housing site, differences between sites, and between the two sites and the city as a whole.

The neighborhood-level conditions we considered were:

- Population density
- Population diversity
- Unemployment
- Median Household Income
- Crime
- Transportation

Health and Neighborhood Conditions at Study Sites

Self-reported Health Status

Residents reported a wide range of adverse health conditions (Figure 1). We found high rates of chronic health issues such as asthma (28%), overweight/obesity (20%), and stress (26%) at Bernal Dwellings. In contrast, at North Beach Place we found lower, but still high rates of chronic health issues, including asthma (14%), diabetes (13%), overweight/obesity (14%), and stress (19%). Moreover, North Beach had higher rates than Bernal for cardiovascular health issues, such as heart disease (10%), high blood pressure (15%), and high cholesterol (21%). The cumulative nature of poor health was also apparent; of 144 survey respondents across both sites, 23 (16.0%) reported a combination of three or more health conditions.

A self-reported health rating, “How would you rate your overall health?” which has been used in previous HOPE VI evaluations showed a remarkable range of responses (Figure 2). While most reported fair health (a rating of 50) at both sites, of concern are the 25% and 14% of respondents that reported worse than fair levels of health at Bernal and North Beach, respectively. Yet, a relatively large proportion of residents reported better than fair health, which is in contrast to previous nationwide HOPE VI studies, and suggest that perceptions of health may be better than expected from the HOPE VI redevelopments outside of San Francisco (Digenis-Bury, Brooks et al. 2008, Manjarrez, Popkin et al. 2007) (See **Introduction** and **Healthy Housing** Chapters).

Greater income (even within this entirely low-income population) had a small, but still significant association with better self-reported health. In contrast, there was no clear evidence from the survey responses that education level was associated with self-reported health.

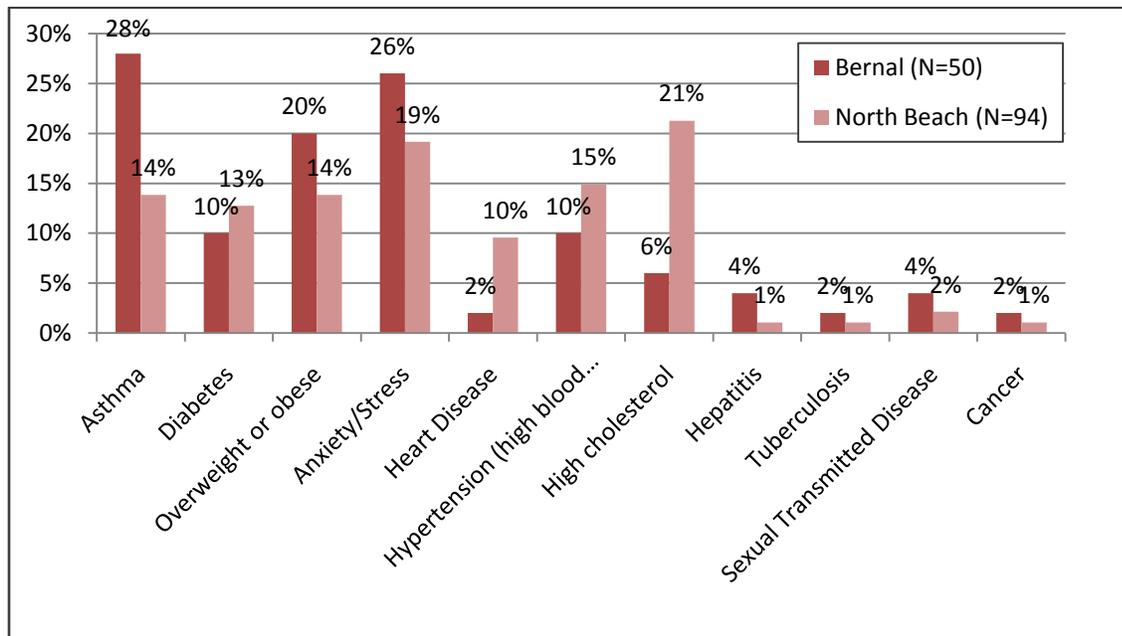


Figure 1. Prevalence of health conditions at both HOPE VI housing sites

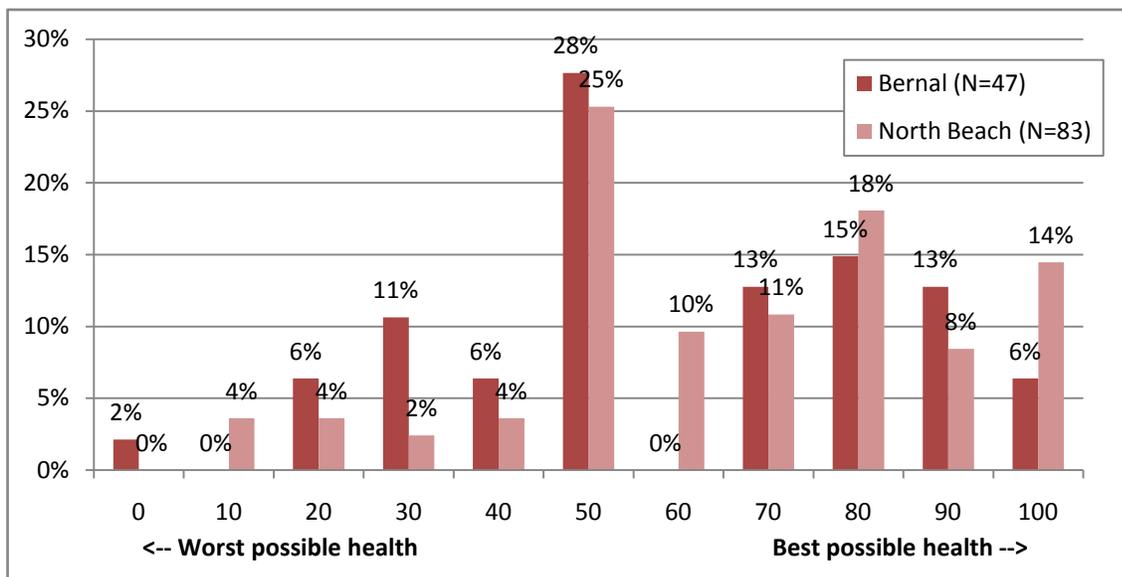


Figure 2. Self-reported health rating: "How would you rate your overall health?"

Good health (score of 50+)		
Incomes	Bernal Dwellings	North Beach Place
<\$5,000	7/11 (64%)	18/23 (78%)
\$5,001 - \$10,000	7/11 (64%)	7/10 (70%)
\$10,001-15,000	3/6 (50%)	11/12 (92%)
15,000+	9/10 (90%)	25/25 (100%)

Health Care Access

One important aspect of health is access to healthcare. Relatively large proportions of respondents claimed that they had health insurance (83% of Bernal Dwelling residents and 64% of North Beach residents). However, this may be misleading because when asked where residents seek healthcare when they get sick the majority responded that they go to the hospital rather than a doctor’s office or clinic (Figure 3).

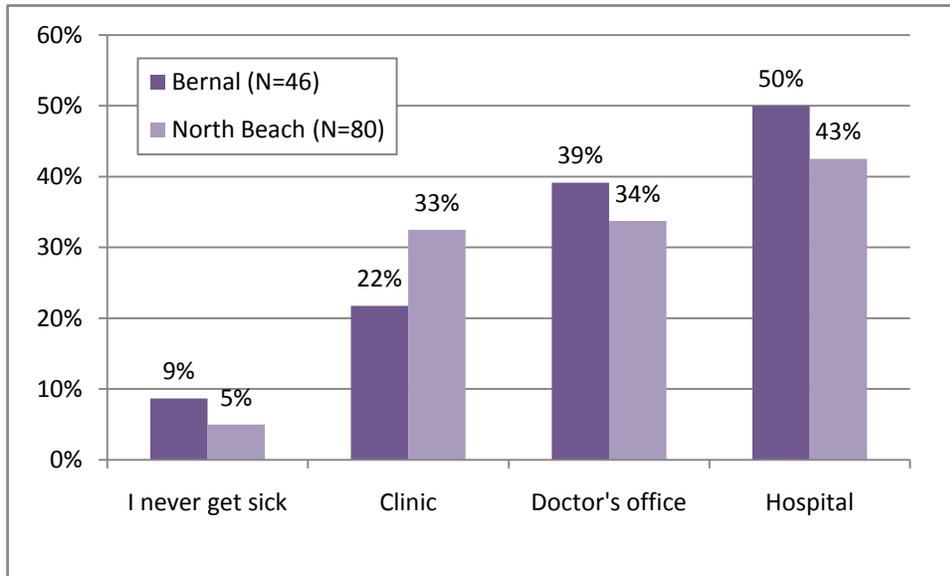
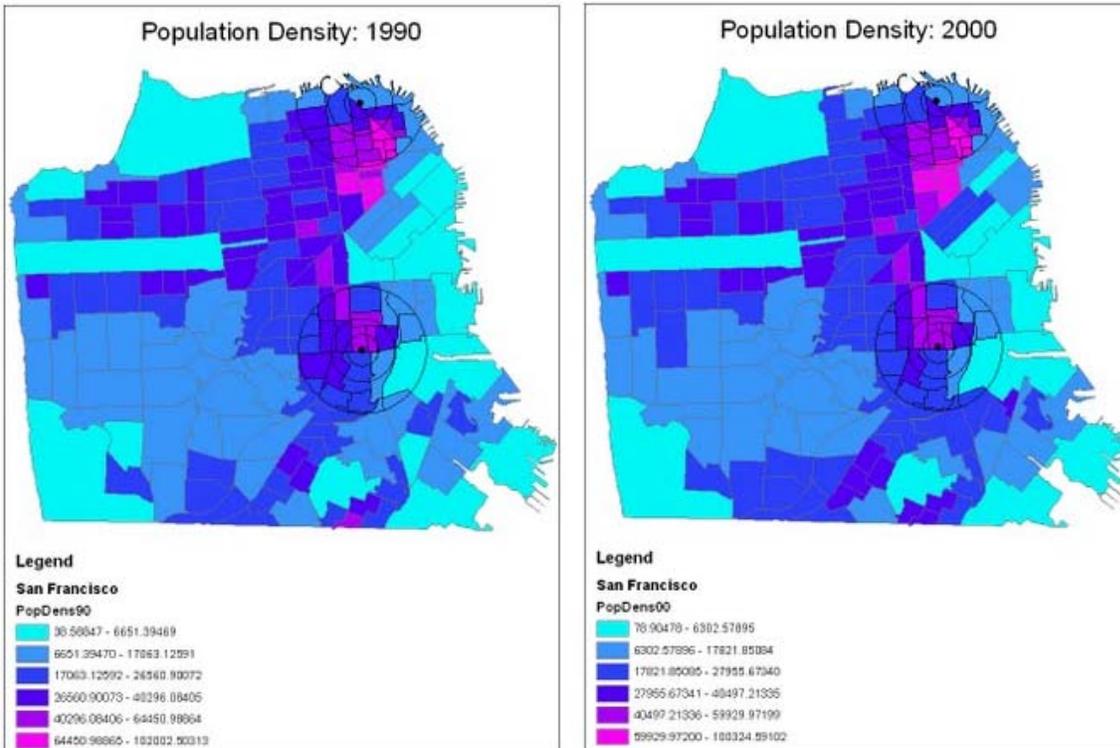


Figure 3. Where do you go when you are sick?

Neighborhood Conditions

Population Density



Compared with the rest of San Francisco, there is a much denser population in the buffer zones surrounding Bernal Dwellings and North Beach Place. For example, within ¼ mile of Bernal Dwellings, the population density is over twice that of San Francisco as a whole. Likewise, the population density within a mile of North Beach Place is over double that of San Francisco.

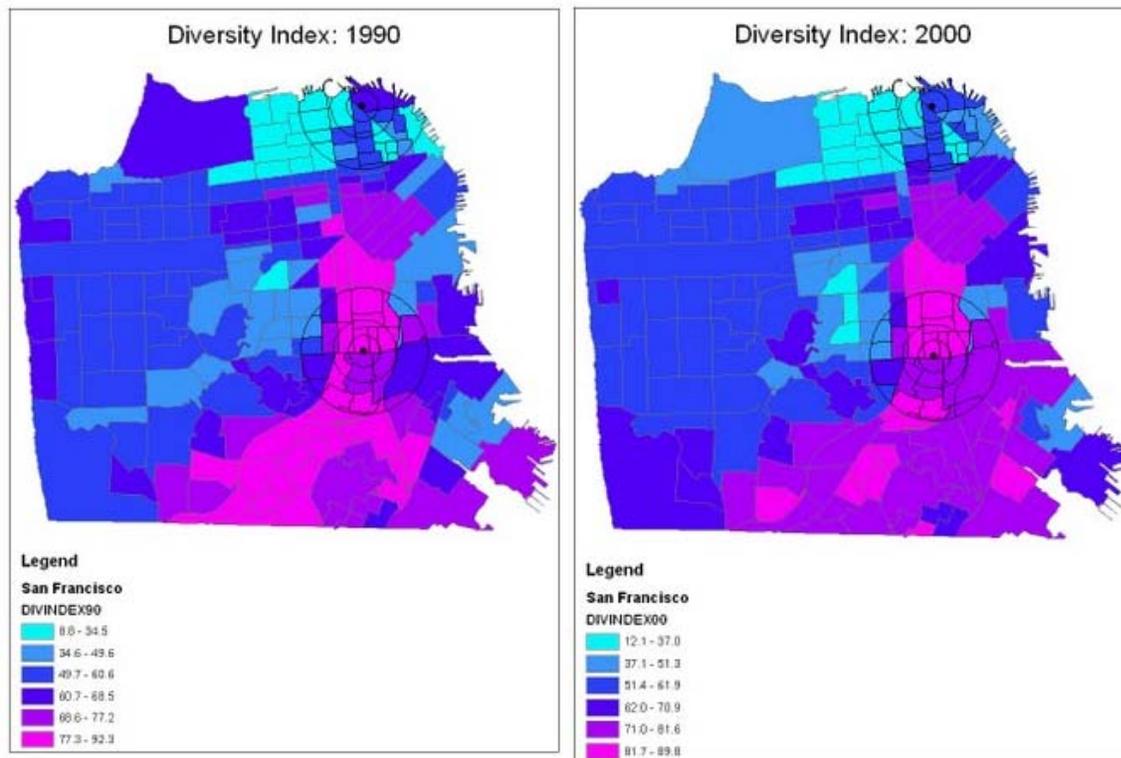
Population Density 2000 (persons/square mile)	Bernal Dwellings	North Beach Place	San Francisco
			16783
<i>within 1/4 mile</i>	36691	21370	
<i>within 1/2 mile</i>	32856	27125	
<i>within 1 mile</i>	24721	35515	

A similar pattern can be observed in the 1990 data as well. For every buffer zone, the population density is much greater than San Francisco as a whole, particularly at Bernal Dwellings and within one mile of North Beach Place.

Population Density 1990 (persons/square mile)	Bernal Dwellings	North Beach Place	San Francisco
			15574
<i>within 1/4 mile</i>	35545	21362	
<i>within 1/2 mile</i>	30996	27039	
<i>within 1 mile</i>	23701	35640	

Public housing residents who live in areas of higher population density may benefit from better access to goods and services, as well as more transportation options, but may also be subjected to higher levels of crowding and its health impacts, such as traffic-related air pollution and noise. Public housing developments should make the most economical use of land through increased density so as to increase the availability of subsidized housing for the city.

Diversity



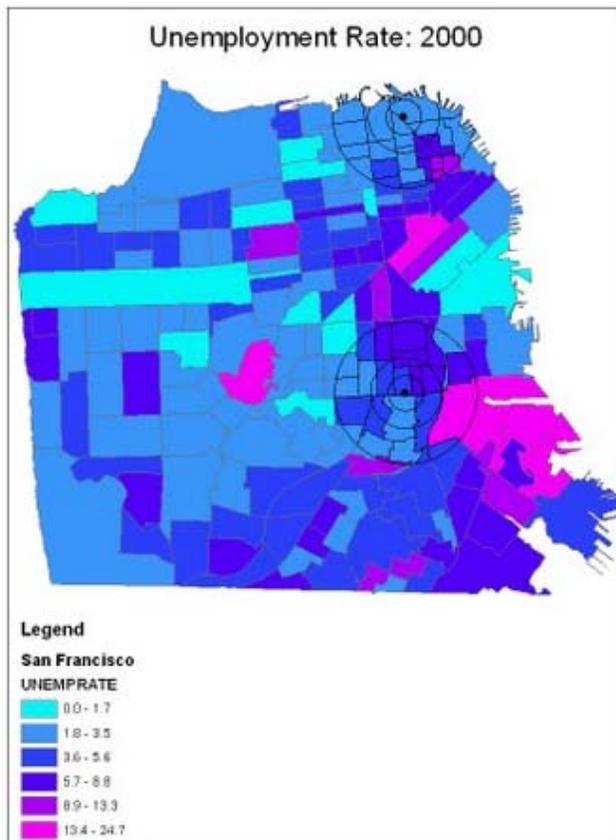
The diversity index is an indicator for how race is distributed within the area. The index ranges from 0, meaning that only one racial/ethnic group is represented in the population, to 100, meaning that all racial/ethnic groups are equally represented in the population. This diversity index is computed using 5 different racial groups: white only (non-Hispanic), black/African-American only (non-Hispanic), Asian or Hawaiian-Pacific Islander only (non-Hispanic), Hispanic/Latino (any race), and American Indian/Alaskan Native or other race or two-or-more race (non-Hispanic). More details on how the diversity index is calculated can be found here: <http://www.bayareacensus.ca.gov/glossary.htm#d>.

There is an interesting contrast in diversity indices between the two housing sites for both 1990 and 2000 data. The diversity index for the North Beach Place buffer zones is lower than that of San Francisco, while the diversity index for the Bernal Dwellings buffer zones is higher than that of San Francisco. This indicates that the neighborhoods surrounding the Bernal Dwellings housing site are considerably more diverse than those of San Francisco in general, whereas the neighborhoods surrounding the North Beach Place housing site are significantly less diverse, and suggests that issues of racial tensions and social cohesion may differ between the two sites. Lower diversity found at North Beach may be misleading, however, because the buffers include both census tracts in the Marina District and Chinatown, both highly homogenous areas individually, but are quite different from one another in terms of race/ethnic composition.

Diversity Index 2000	Bernal Dwellings	North Beach Place	San Francisco
<i>within 1/4 mile</i>	82	56	
<i>within 1/2 mile</i>	82	49	
<i>within 1 mile</i>	76	45	

Diversity Index 1990	Bernal Dwellings	North Beach Place	San Francisco
<i>within 1/4 mile</i>	83	58	
<i>within 1/2 mile</i>	82	51	
<i>within 1 mile</i>	75	43	

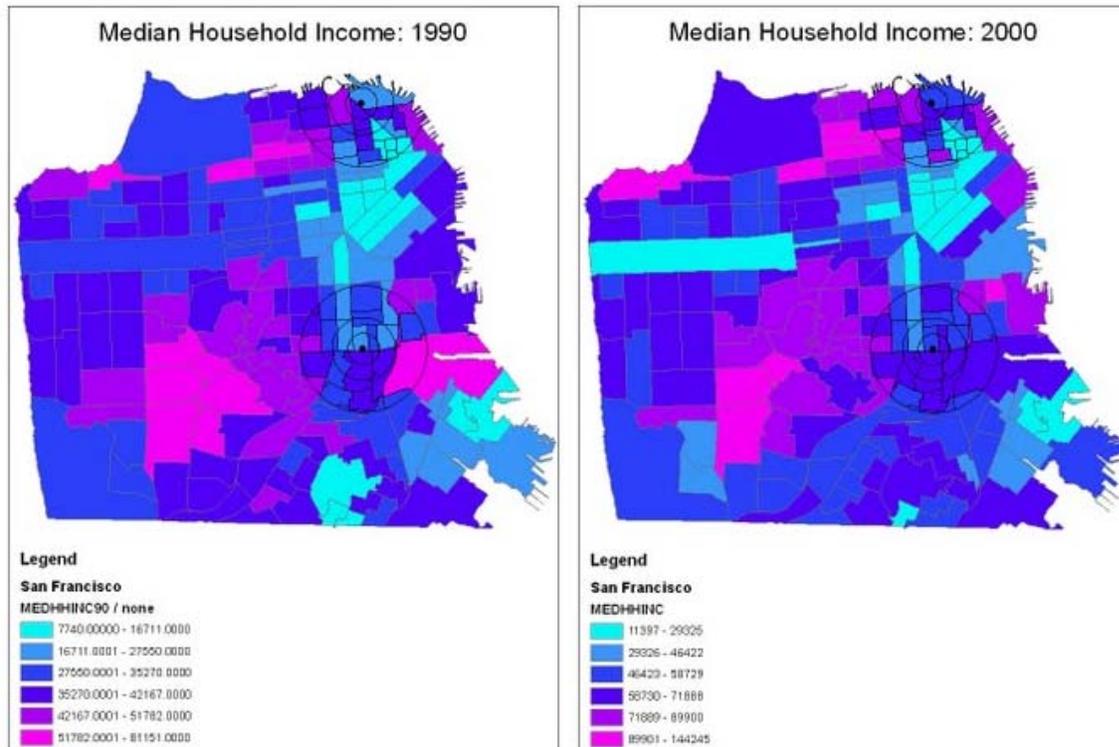
Unemployment Rate (2000)



Unemployment data are only available from the 2000 census. The buffer zones surrounding the Bernal Dwellings site are similar to the unemployment rate of San Francisco as a whole (about 5%). In contrast, the unemployment rates in the buffer zones surrounding the North Beach Place site, are 1-2% lower than those of San Francisco as a whole, which suggests that residents at Bernal may have greater competition within the local community for available jobs than those living at North Beach. It may also be that there are greater job opportunities in the North Beach area than Bernal, though both neighborhoods are relatively vibrant mixed residential-commercial neighborhoods in the city.

Unemployment Rate 2000	Bernal Dwellings	North Beach Place	San Francisco
<i>within 1/4 mile</i>	5	3	5
<i>within 1/2 mile</i>	5	3	
<i>within 1 mile</i>	5	4	

Median Household Income



Based on the most current decennial census data (2000), the median household income in the areas surrounding both housing sites are fairly comparable to that of San Francisco as a whole. Interestingly, in the ¼ mile buffer zone around North Beach Place, the average median household income is nearly \$5000 higher than both the Bernal Dwellings housing site and San Francisco as a whole.

Another interesting point here is that in 1990, the ¼ mile buffer zone around each of the housing sites had average median household incomes of approximately \$4000 more than the rest of San Francisco. However, during the 10 years between the two censuses, this discrepancy faded for Bernal Dwellings, yet remained for North Beach Place. This suggests that issues of income-related social cohesion may have been prevalent at both sites in the 1990s with relatively low-income public housing residents living within above-standard income areas of the city. While such tension may have decreased in Bernal, it may still be an issue for North Beach public housing residents. We note that North Beach Place is located in an area of the city frequented by tourists, which may increase the costs of living, and create additional income-related tension between residents of the housing site and the surrounding community.

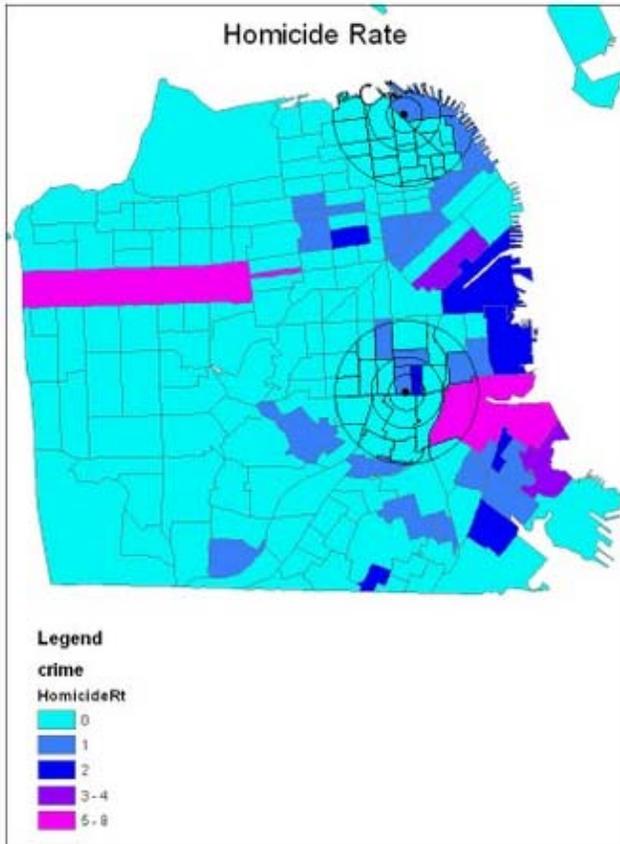
Median Household Income 2000	Bernal Dwellings	North Beach Place	San Francisco
			58741
<i>within 1/4 mile</i>	58730	63010	
<i>within 1/2 mile</i>	56835	59910	
<i>within 1 mile</i>	58778	54929	

Median Household Income 1990	Bernal Dwellings	North Beach Place	San Francisco
			34803
<i>within 1/4 mile</i>	38160	38921	
<i>within 1/2 mile</i>	38846	46786	
<i>within 1 mile</i>	40859	31518	

Crime

Violent crime data was obtained from the San Francisco Police Department via the Healthy Development Management Tool (HDMT). The data is from the years 2005 – 2007, and includes data on homicides, sexual assaults, and physical assaults.

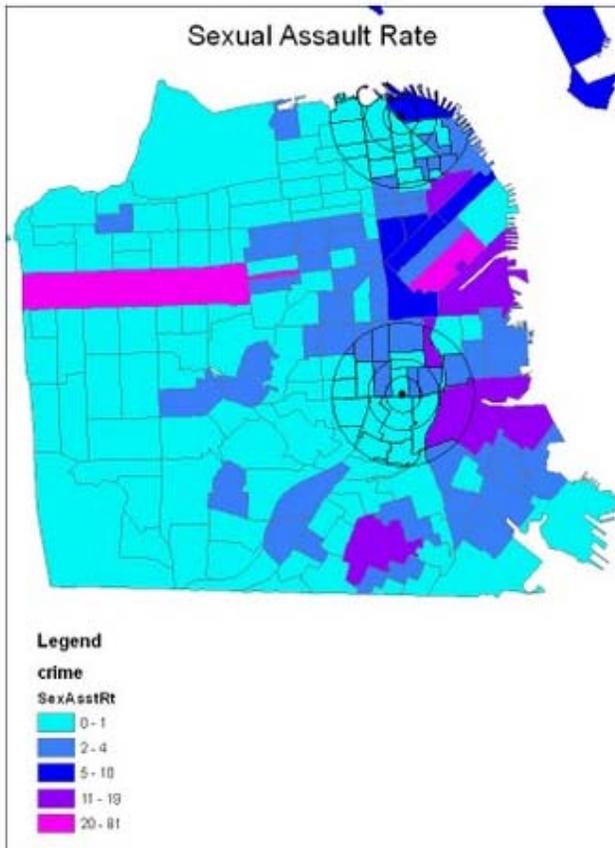
Homicides



Between 2005 and 2007, there were 193 reported homicides in San Francisco. Of these, over 20% occurred within a 1 mile radius of the Bernal Dwellings housing site. Within a ¼ mile of Bernal Dwellings, over 7% of the homicides occurred. This is a stark contrast to the approximate 5% of homicides that occurred within 1 mile and 1% that occurred within ¼ mile of the North Beach Place housing site.

Homicides	Bernal Dwellings	Percent of Total	North Beach Place	Percent of Total	San Francisco
					193
<i>within 1/4 mile</i>	14	7	2	1	
<i>within 1/2 mile</i>	20	10	3	2	
<i>within 1 mile</i>	41	21	10	5	

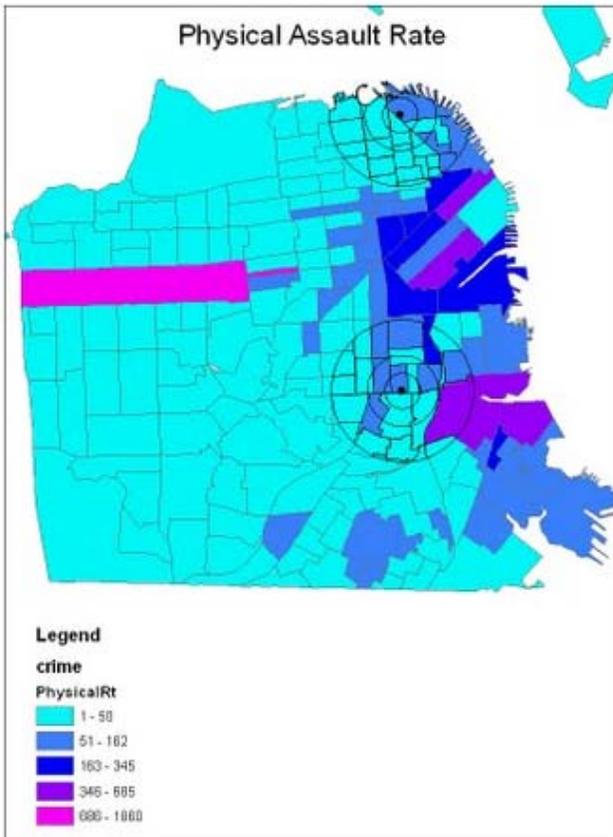
Sexual Assaults



Between 2005 and 2007, there were 1226 sexual assaults within the city of San Francisco. These violent crimes are more evenly distributed between the two housing sites than the reported homicides, though the Bernal Dwellings site still experienced a higher percentage of the total reported sexual assaults for each buffer zone compared to the North Beach Place site.

Sexual Assaults	Bernal Dwellings	Percent of Total	North Beach Place	Percent of Total	San Francisco
					1226
<i>within 1/4 mile</i>	41	3	29	2	
<i>within 1/2 mile</i>	85	7	40	3	
<i>within 1 mile</i>	191	16	135	11	

Physical Assaults



Between 2005 and 2007, there were 31,553 reported physical assaults in San Francisco. Again, there was a higher percentage of these violent crimes being committed within the buffer zones surrounding the Bernal Dwellings housing site than the North Beach Place housing site. While over 16% of reported physical assaults occurred within 1 mile of Bernal Dwellings, less than 10% occurred within 1 mile of North Beach Place. Also, nearly double the number of physical assaults occurred within a ½ mile radius of Bernal Dwellings compared to North Beach Place.

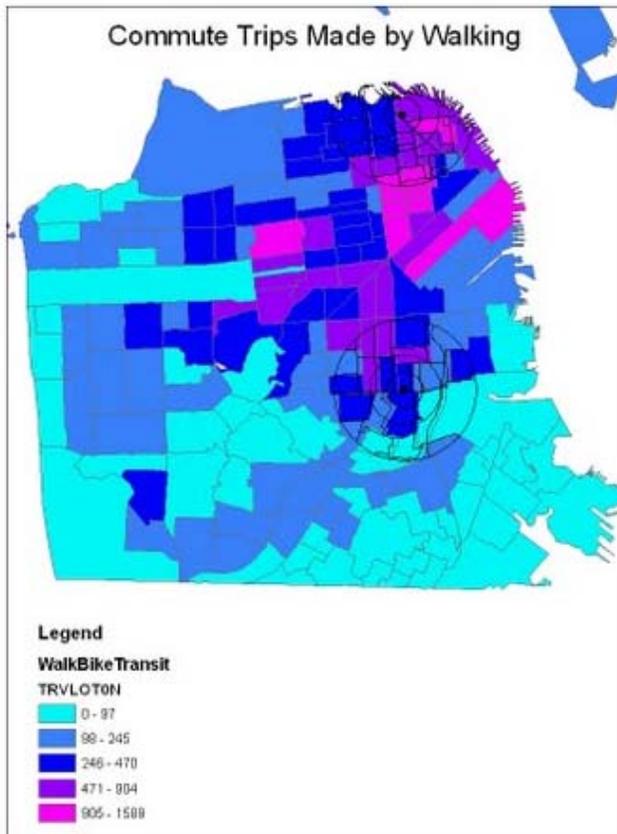
Sexual Assaults	Bernal Dwellings	Percent of Total	North Beach Place	Percent of Total	San Francisco
					31553
<i>within 1/4 mile</i>	1287	4	841	3	
<i>within 1/2 mile</i>	2364	7	1196	4	
<i>within 1 mile</i>	5105	16	3139	10	

The three maps for homicides, sexual assault, and physical assault all illustrate stark spatial disparities in violent crime across the city that suggest an ongoing and increasing need for focused community-based solutions to crime-reduction. Safety and fear of crime is a major factor that deters people from leaving their home, and getting healthy physical activity. Crime may also build distrust within the community at large. Moreover, crime may have a different

impact upon different populations, for example especially among women for sexual assaults, among young men for homicides, and among elderly and disabled for physical assaults.

Transportation

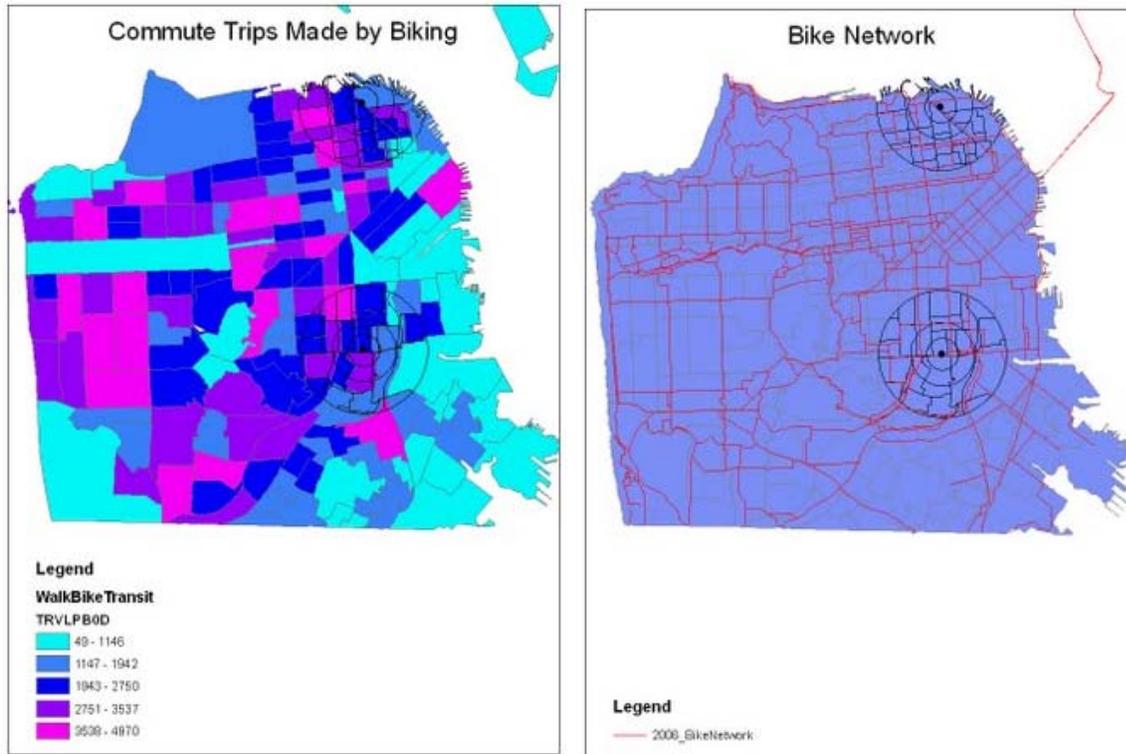
Commute Trips Made by Walking



These data were obtained from the HDMT, and are originally from the 2000 US Census. A higher percentage of commute trips made by walking occur within the buffer zones surrounding North Beach Place compared to the buffer zones surrounding Bernal Dwellings. Within the 1 mile buffer zone, there is nearly double the percentage of commute trips made by walking occurring at North Beach Place than at Bernal Dwellings. Both sites are in locations where commuting by walking is common though, compared to the rest of the city.

Commute Trips Made by Walking	Bernal Dwellings	Percent of Total	North Beach Place	Percent of Total	San Francisco
<i>within 1/4 mile</i>	1582	3	2532	5	
<i>within 1/2 mile</i>	3886	7	6241	12	
<i>within 1 mile</i>	7209	13	14202	26	

Commute Trips Made by Biking



These data were also obtained through the HDMT, and are originally 2000 US Census data. There was a slightly higher percentage of commute trips made by biking in the buffer zones surrounding Bernal Dwellings compared to the buffer zones surrounding North Beach Place, though the difference is small for all buffer zones. This could be explained by the fact that there is a slightly higher percentage of bike network mileage within the buffer zones surrounding Bernal Dwellings compared with the buffer zones surrounding North Beach Place. Data on bike network mileage was also obtained from the HDMT, and is originally 2006 data from the San Francisco Municipal Transit Authority. While bike commuting is prevalent throughout the city, we note that biking in the southeast portion of the city is less common, which may be related to sparser or poorer quality routes, concerns over safety, and/or lower population densities in this area.

Commute Trips by Biking	Bernal Dwellings	Percent of Total	North Beach Place	Percent of Total	San Francisco
<i>within 1/4 mile</i>	13792	3	9461	2	
<i>within 1/2 mile</i>	28102	7	26611	7	
<i>within 1 mile</i>	62686	16	52776	13	

Bike Network Mileage	Bernal Dwellings	Percent of Total	North Beach Place	Percent of Total	San Francisco
<i>within 1/4 mile</i>	1	0.5	1	0.4	
<i>within 1/2 mile</i>	4	2	3	1	
<i>within 1 mile</i>	17	8	11	5	

Conclusions and Recommendations

Self-reported Health Status

Despite improvements that have occurred with redevelopment, it is clear that current health conditions are not as good as in the general population at both housing sites. Most notable are high rates of chronic health issues, such as asthma and overweight/obesity. Stress was very high at both sites. Additionally, high rates of cardiovascular disease risk factors, such as high blood pressure and high cholesterol were reported at North Beach Place. Moreover, 1 out of 6 residents reported combinations of 3 or more poor health conditions.

Among the survey respondents, lower income was found to be associated with poorer self-reported health. Other factors such as health care access may play a role in health conditions. An alarming majority of residents rely upon hospitals for their main health care.

Neighborhood Conditions

San Francisco is a diverse city with very different neighborhoods. The two sites we analyzed are both located in relatively dense, commercially vibrant parts of the city, with opportunities for walking and bicycling, yet are different in a number of ways. Bernal is located in a much more socially diverse part of town than North Beach, though North Beach lies between two low-diversity, but distinct areas. Unemployment is greater in the neighborhood surrounding Bernal than North Beach. Household incomes are higher around North Beach than Bernal. In addition, there are strong hotspots of crime throughout the city – North Beach and Bernal are not located in the worst places in the city with respect to crime, but are clearly in trouble areas. These factors (the levels of population diversity, income diversity, and crime rates) potentially affect social cohesion, as well as potentially affect willingness and comfort in spending time outside and getting healthy physical exercise and social interaction.

New HOPE SF development should consider neighborhood differences in the redevelopment planning process. Land use, transportation, and zoning decisions made during the planning

process should target improvements in these, and other neighborhood-level factors that may impact health.

Recommendations

Recommendations for Bernal Dwellings and North Beach Place

1. Coordinate with SF Department of Public Health for improved health care services and access to health insurance.
2. Outreach to local clinics to promote better use of available services to address health disparities in public housing populations.
3. Exposure to tobacco smoke was frequently reported. Smoking cessation programs should be explored, particularly given high rates of asthma among residents.
4. Some health issues such as overweight and obesity, diabetes, and cardiovascular health issues benefit from physical activity and exercise. Coordinated exercise programs for residents should be encouraged (see **Healthy Eating Active Living** Chapter)
5. Recommendations on how to better integrate public housing residents with the neighboring community are presented in the **Social Cohesion** Chapter.

Recommendations for HOPE SF

In addition to consideration of the above issues that have been identified for HOPE VI sites, new redevelopment should consider:

1. Participation of the residents and a variety of stakeholders in explicit discussions of how to improve health, particularly the chronic health conditions of public housing residents as part of the redevelopment planning process.
2. Allow for open participation from public housing and surrounding residents from each neighborhood in the planning process to consider local health challenges and opportunities.

References

- Digenis-Bury EC, Brooks DR, Chen L, Ostrem M, Horsburgh CR. Use of a Population-Based Survey to Describe the Health of Boston Public Housing Residents. 2008;98(1):85.
- Popkin SJ, Katz B, Cunningham MK, Brown KD, Gustafson J, Turner MA. DECADE OF HOPE VI: Research Findings and Policy Challenges: The Urban Institute, The Brookings Institution; 2004.
- Manjarrez C, Popkin SJ, Guernsey E. Poor Health: Adding Insult to Injury for HOPE VI Families. Washington, DC: Urban Institute Metropolitan Housing and Communities Center; 2007.

Healthy Housing and Environmental Health

Questions for HIA

- *How do housing environmental conditions affect health?*
- *How were housing environmental conditions impacted by redevelopment?*
- *What is the current state of housing environmental conditions at the HOPE VI housing sites?*
- *What are current health conditions at the HOPE VI housing sites?*

Background

“Adequate shelter means more than a roof over one’s head. It also means adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and durability; adequate lighting, heating and ventilation; adequate basic infrastructure, such as water-supply, sanitation and waste-management facilities; suitable environmental quality and health-related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at an affordable cost. Adequacy should be determined together with the people concerned, bearing in mind the prospect for gradual development. Adequacy often varies from country to country, since it depends on specific cultural, social, environmental and economic factors. Gender-specific and age-specific factors, such as the exposure of children and women to toxic substances, should be considered in this context...” (United Nations Conference on Human Settlements (Habitat II) 1996).

Much is known about many of the pathways between housing and health. Recent science has attempted to review the strength of evidence for these pathways (Sandel, Sharfstein et al. 1999; Matte and Jacobs 2000; Krieger and Higgins 2002; Breyse, Farr et al. 2004; W.H.O. 2004), with the aims of understanding the efficacy of housing interventions on improving health (Saegert, Klitzman et al. 2003; National Center for Healthy Housing 2009), and translating evidence into the practice of creating and maintaining healthy housing (Centers for Disease Control and Prevention and U.S. Department of Housing and Urban Development 2006).

Despite increasing appreciation for the breadth of pathways through which housing affects health, in the U.S., we are not aware of any surveys that allow us to comprehensively assess both housing and health issues. Some researchers have conducted ecologic analyses of separate national surveys. One such analysis is a study of 30 years of housing and population health data from the American Housing Survey and National Health and Nutrition Examination Survey, which found that housing age and quality and amenities are associated with changes in lead poisoning; heating and air conditioning and prevalence of broken windows and bars on

windows are associated with changes in the prevalence of asthma, trends in housing air conditioning are associated with those for obesity; and trends in cardiovascular health are associated with proximity to open space, commercial and industrial facilities, noise, and neighborhood air quality (Jacobs, Wilson et al. 2009). There are limitations to ecologic studies; thus these associations cannot be considered causal linkages. However, the study clearly showed that health disparities by race/ethnicity have not declined in 30 years.

European studies are beginning to comprehensively consider housing and health. Data from the World Health Organization's large analysis and review of European housing and health status (LARES) study – a survey conducted across eight cities and 3373 households, and which considered satisfaction, sleep, mental health, and cardiovascular health – suggest that low satisfaction was associated with a number of factors including noise, lack of play areas for children, poor safety, lack of vegetation along streets, and the presence of graffiti and trash (Braubach 2007). Sleep disturbance and depression were both strongly associated with noise and concerns over safety. Finally, cardiovascular symptoms were only found to be associated with concerns over safety. Of the housing factors, noise annoyance had the greatest impacts upon health, suggesting that exposure to community noise remains an important public health problem.

While few large scale studies have comprehensively looked at housing and health like the LARES study, the recent scientific reviews have identified evidence for numerous pathways linking various aspects of housing and health. These pathways to health are complex, and in many cases involve multiple factors and operate at various levels. Hence, for the sake of organization we have categorized pathways as operating at the societal level, macro, and microenvironmental levels, though obviously there is overlap between these categories. Each pathway consists of a housing factor that has the potential to change one or more health determinants, which in turn can alter one or more health outcomes.

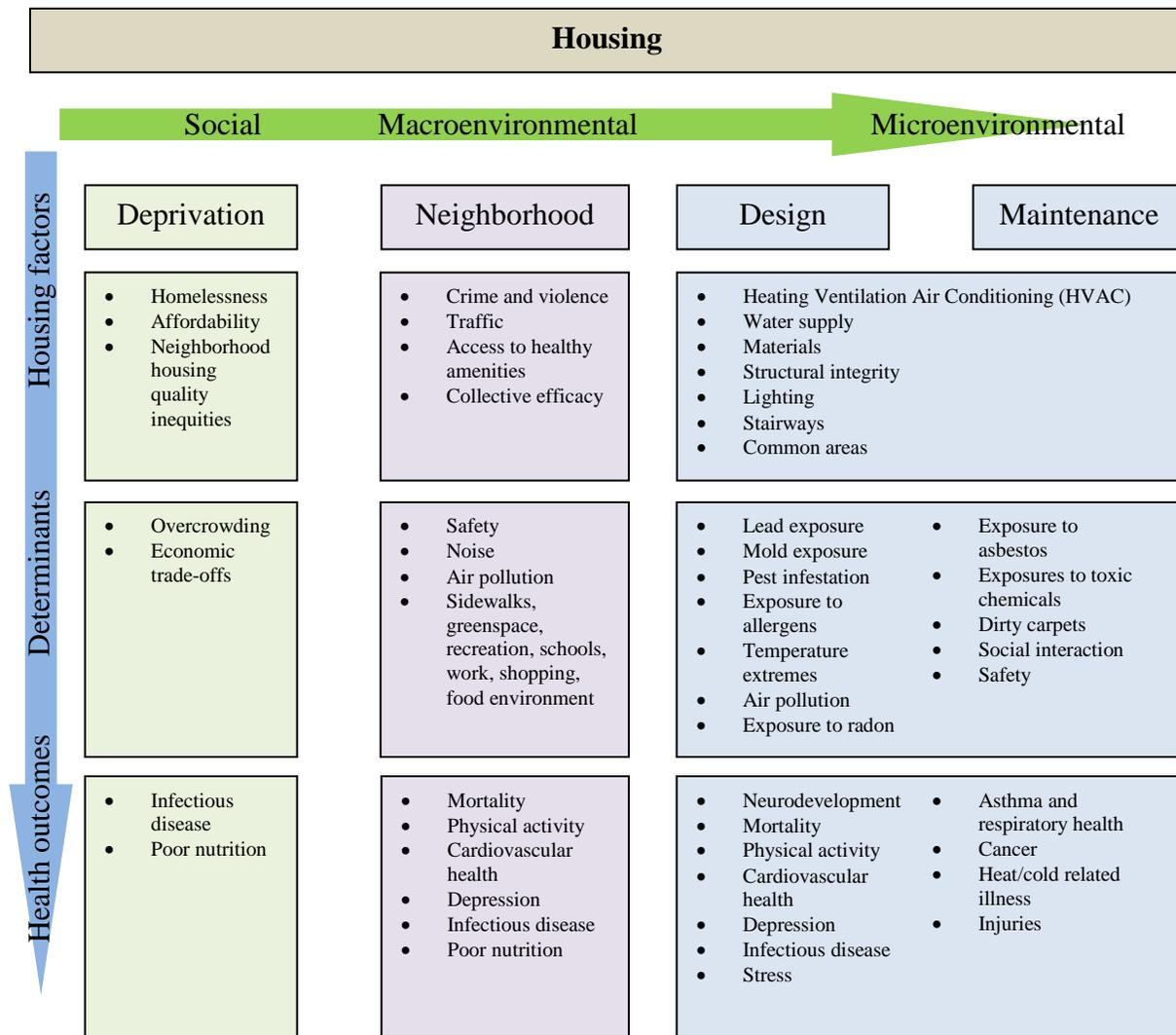


Figure 1. Pathways between housing and health

Evidence on the relationship between Housing and Health

Microenvironmental housing factors and health

The strongest evidence for housing-health relationships exist at the microenvironmental level, which considers the associations between how well a dwelling is designed and maintained and its health effects. For instance, it has long been recognized that choice of materials in housing, such as the use of lead-based paint affects health. Deteriorating lead-based paint in homes has been associated with lead exposures, which affects neurodevelopment in children (Jacobs, Clickner et al. 2002).

Household indoor air quality may also affect health. Exposures to poor air quality depend upon building materials, maintenance, structural defects, ventilation, and resident behaviors.

Additionally, strong evidence exists between exposures to indoor tobacco smoke and poor birth outcomes and infant development, risk of sudden infant death syndrome (SIDS), as well as impaired cognitive development in children and the development and exacerbation of asthma (Bauman, Flewelling et al. 1991; Fergusson, Horwood et al. 1993; Eskenazi, Prehn et al. 1995; Williams, O'Callaghan et al. 1998; Institute of Medicine 2000).

Mixed evidence exists for household exposures to volatile organic compounds (VOCs). VOCs are chemicals that are released as gases from many household items, including paints, varnishes, and cleaning products, particle board and plywood, adhesives, as well as “air fresheners”. VOCs include a range of chemicals, most notably formaldehyde, which is classified as a known human carcinogen. The health effects of VOCs are varied (Andersson, Bakke et al. 1997), and may potentially be linked with so-called “sick building syndrome” (National Center for Healthy Housing 2009), though more research is needed to prove these relationships. For instance, the Institutes of Medicine found insufficient evidence linking residential VOC exposures and asthma (Institute of Medicine 2000).

Some healthy housing issues are strongly related to maintenance. For instance, the presence of dirty carpets is associated with dust, allergens, and pesticide residues, which are related to allergic reactions, respiratory, neurological, and hematological illness (National Center for Healthy Housing 2009). Structural defects (e.g., cracks and holes in walls) and excess moisture (e.g., from poor ventilation and leaky plumbing) that can occur from improper maintenance are associated with pest infestations. Dust mites, cockroaches, mice, and rats are all examples of household pests that affect health. Dust mite allergens are causally associated with asthma in children (Institute of Medicine 2000; Huss, Adkinson et al. 2001; Cole Johnson, Ownby et al. 2004; Brussee, Smit et al. 2005; Illi, von Mutius et al. 2006). Removal of dust mite allergens has been shown to improve asthma symptoms (Platts-Mills and Mitchell 1982; Boner, Pescolderrungg et al. 2002). Cockroach allergens are known to exacerbate asthma symptoms (Garcia, Corbett et al. 1994; Rosenstreich, Eggleston et al. 1997; Matsui, Wood et al. 2003; Chew, Perzanowski et al. 2008), and may lead to the development of asthma (Litonjua, Carey et al. 2001). Rodents such as mice and rats create indoor allergens which can contribute to allergy and asthma (Phipatanakul, Eggleston et al. 2000; Phipatanakul, Eggleston et al. 2000).

The use of chemicals to control pests may result in household exposures to pesticide residues. These residues may persist in the environment for long periods of time, resulting in long term exposures that may result in numerous health effects, including attention and behavioral problems and neuropsychological deficits (Chanda and Pope 1996; Rice and Barone 2000). There is some, but inadequate evidence that residential pesticide exposures are also associated with asthma exacerbation (Institute of Medicine 2000). Pesticides are particularly a concern for low income neighborhoods, where pests are more common (Whyatt, Camann et al. 2002; Berkowitz, Obel et al. 2003).

Poorly maintained and leaky plumbing, as well as inadequate ventilation may also contribute to the formation of excess moisture that leads to fungal mold growth. There is considerable evidence for the potential associations between exposures to mold and moisture and a wide

variety of health outcomes, particularly for the exacerbation of asthma symptoms (Institute of Medicine 2000; Mudarri and Fisk 2007). However, evidence for associations between mold and asthma causation, dyspnea, and other respiratory illness is weaker. Mold can also act as a toxic irritant, leading to headaches, fever, nausea and vomiting, mucus membrane irritation, and may lead to “sick building” symptoms (Douwes 2005; Walinder, Ernstgard et al. 2005).

Poor ventilation may also lead to the concentration of indoor air pollutants and toxic chemicals. For example, improper combustion appliances may contribute to elevated exposures of nitrogen dioxide, which may exacerbate asthma (Samet and Utell 1990; Samet and Bell 2004). Likewise, heating systems may produce carbon monoxide, which if not properly vented may lead to headaches, and worse acute intoxication and death (Centers for Disease Control and Prevention 2005). Structural defects and poor maintenance of basements may lead to the intrusion of radon – a colorless, odorless gas that naturally is found in soil and rock in certain parts of the country – into a home, which has been associated with lung cancer (Darby, Hill et al. 2005; Krewski, Lubin et al. 2006; Samet 2006).

Poorly designed, substandard, or poorly maintained housing can increase the risk of injuries and death from fire as well as from slips, falls, and drowning. Fire-related risks are particularly severe for those living in housing that does not meet building codes, are abandoned, lack safety equipment such as fire alarms and extinguishers, and have faulty electrical systems or appliances (Istre, McCoy et al. 2001; National Safety Council 2003; U.S. Fire Administration 2006). Injuries such as falls can occur from improperly designed stairs, lack of handrails, the presence of slipping/tripping hazards, and poor lighting (Carter, Campbell et al. 1997; Marshall, Runyan et al. 2005).

Neighborhood and Social Factors and health

Numerous studies have documented the adverse health impacts of living in poor neighborhoods (Ellen, Mijanovich et al. 2001; Pickett and Pearl 2001; Kawachi and Berkman 2003). The risks include those for mortality, heart disease, birth outcomes, infectious diseases, mental health, physical inactivity and obesity, and injury. These same populations are also less likely to have access to health promoting neighborhood amenities such as healthy foods, which may be associated with population-level risk for obesity (Morland, Wing et al. 2002). And, neighborhood concerns over safety may prevent some from obtaining sufficient outdoor physical activity (Sallis, McKenzie et al. 1997).

Individuals living in areas of poverty are more likely to be exposed to environmental hazards. Exposure to environmental hazards such as traffic-related air pollution is associated with excess risks for mortality, cardiovascular disease, and a variety of respiratory illnesses (Health Effects Institute 2009). Likewise, exposures to community noise are associated with a number of health impacts, including sleep disturbance and annoyance (Passchier-Vermeer and Passchier 2000).

Public Housing and Health

The availability of affordable housing is particularly important for low income populations. The lack of affordable housing may lead some to become homeless, some to become displaced, and some to make economic sacrifices (e.g., for food and/or energy costs) (Fertig and Reingold 2007). Still others may live in overcrowded situations, which may create risks for acquiring communicable diseases, and affects cognition and creates psychological distress (Elender, Bentham et al. 1998; Hawker, Bakhshi et al. 1999; Evans 2006).

Affordable housing programs, which include public housing and rental vouchers can serve as a safety net for low income populations. Unfortunately, a number of studies have shown that those living in public housing sites have poor health. These studies have clearly shown increased levels of self-reported poor health, asthma, hypertension, diabetes, obesity, depression, smoking, physical activity, exposures to poor indoor air quality and pests, and poor access to healthcare. In Boston, public housing residents were more than four times as likely to have fair or poor health compared to other city residents (Digenis-Bury, Brooks et al. 2008). Moreover, public housing residents were roughly 2-3 times as likely to have hypertension, asthma, diabetes, disabilities, dental problems, and smoking, 1-2 times as likely to not get enough physical activity and be obese (Table 1). Stark social factors separated public housing residents from other city residents including significantly lower levels of education, employment, and household income. Indeed, the magnitude of poor health among public housing residents is staggering: close to one third of public housing residents reported fair to poor health, have hypertension, smoke, and/or are obese; close to 20% have asthma and/or have signs of depression.

The Urban Institute's Panel Study conducted in 2001 on the health of public housing sites selected for redevelopment under the HOPE VI program illustrates how extreme health inequities existed in many of the sites before redevelopment occurred (Table 2) (Popkin, Katz et al. 2004). A follow-up evaluation study on how housing and health conditions have changed as a result of HOPE VI conducted in 2003 and 2005 suggests that those relocated to the private housing market during HOPE VI redevelopment had the greatest health benefits, yet those who relocated to other public housing projects still saw decreases in violence and drug activity, but not housing quality (National Center for Healthy Housing 2009).

A report published by the Urban Institute provides some insight into how health conditions have changed as a result of HOPE VI (Manjarrez, Popkin et al. 2007). In the 2005 evaluation study 2 out of 5 respondents to a survey conducted in five public housing redevelopments self-reported their health condition as "fair" to "poor", and that the health trends have not improved, despite improvements in housing environments. Moreover, self-reported health rates were just as likely to be poor among private market renters as those living in traditional public housing. The study found that rates of numerous chronic diseases (arthritis, asthma, obesity, depression, diabetes, hypertension and stroke) were in many cases twice as high as the rates for black women nationwide, and individuals suffering from multiple health problems

were common (23% reporting 3 or more health problems). Moreover, the morbidity was correlated with unemployment, disability, impaired mobility, and increased mortality.

Table 1. Health of public housing residents to other city residents in Boston (Digenis-Bury, Brooks et al. 2008)

	Public Housing Residents (n = 393)	Other City Residents (n = 2526)	Crude Prevalence Odds Ratio
	%	%	Ratio
Education			
Less than high school	23.5	5.2	
College graduate	14	54	
Employment			
Unemployed	13.7	5.9	
Annual household income			
<\$10,000	25.9	4.5	
Health Status			
Fair or poor health status	32.9	9.3	4.57
Hypertension (ever diagnosed)	36	17.4	2.57
Asthma (current)	19.2	9	2.46
Diabetes (ever diagnosed)	13.8	5.3	3.35
Obesity	31	18	1.91
Disabled for ≥ 1 year	33.9	17.8	2.38
Missing ≥ 6 teeth	24.9	11.8	2.6
Felt sad, blue, or depressed ≥ 15 days in past month	19.6	6.5	3.12
Teeth not cleaned in > 2 years	28	15.2	2.18
Smoker (current)	34.4	20.6	1.99
Insufficient physical activity	61.8	53.1	1.43

Table 2. Resident and housing conditions at HOPE VI sites before redevelopment compared to other U.S. assisted housing, U.S. poor, and U.S. non-poor.

	HOPE VI (before redevelopment)	US assisted housing	US poor	US non-poor
	%	%	%	%
Household income				
<\$10,000	67.10	36.00	74.70	0.70
Hardship				
worry that food would run out	50.10	52.60	44.90	13.30
Housing quality				
apartment cold for >24 hours	32.80	12.90	11.60	7.10
water leaks	41.50	14.20	10.80	9.30
toilet breakdowns	24.50	6.50	5.10	2.50
peeling paint	35.90	4.90	4.20	2.30
Health				
health is excellent or very good	37.70	35.30	48.70	66.80
asthma	21.80	16.30	15.20	10.90

The Moving to Opportunity study, which began in 1994 and was sponsored by the U.S. Department of Housing and Urban Development, was a social experiment that randomly selected low-income public housing families to live either in poor or non-poor neighborhoods in order to follow-up their changes in health status (Goering and Feins 2003; Leventhal and Brooks-Gunn 2003; Acevedo-Garcia, Osypuk et al. 2004). Sites included Baltimore, Boston, Chicago, Los Angeles and New York. Participants were randomized into 3 groups: an experimental group that received Section 8 vouchers that could only be used in low-poverty neighborhood, a group that had unrestricted vouchers, and an in-place control group that did not receive vouchers and remained eligible for public housing.

These studies have shown some short term gains in health among those in the experimental group, and in some instances in the unrestricted Section 8 voucher group compared to those that remained in public housing. These health improvements included increased rates of fresh fruit and vegetable consumption and lower rates of adult obesity, improved perceptions of safety and being involved in crime, and improvements in girls' mental health status (Orr, Feins et al. 2003). However, the latest follow-up of the Moving to Opportunity study has not found improvement in asthma, blood pressure, and alcohol use, but has found some negative impacts to adolescent boys (Acevedo-Garcia, Osypuk et al. 2004). Moreover, there are some inherent problems in the study, including high rates of those in the experimental group moving to other locations, though many remained in low-poverty neighborhoods. Despite this limitation and findings of only short-term effects, the Moving to Opportunity studies have generally illustrated the importance of increasing residential mobility to low-poverty neighborhoods.

Standards

National, state, and local healthy objectives, laws and codes aim to improve the health and safety of homes.

National

Healthy People 2010 National Health Objectives (United States Department of Health and Human Services):

- Goal 8-11: Eliminate elevated blood lead levels in children
- Goal 8-16: Reduce indoor allergen levels
- Goal 8-19: Increase the number of new homes constructed to be radon resistant
- Goal 8-23: Reduce the proportion of occupied housing units that are substandard

U.S. Housing Act of 1937 to provide decent and safe dwellings for low-income families.

US Department of Housing and Urban Development (United States Department of Housing and Urban Development HUD Strategic Plan. FY 2006-2011):

- A: Increase homeownership opportunities
 - A1: Expand national homeownership opportunities
 - A2: Increase minority homeownership
 - A5: Help HUD-assisted renters become homeowners
 - A6: Keep existing homeowners from losing their homes
- B. Promote decent affordable housing
 - B1: Expand access to and availability of decent, affordable rental housing
 - B3: Improve housing opportunities for the elderly and persons with disabilities
- C. Strengthen communities
 - C2: Enhance sustainability of communities by expanding economic opportunities
 - C3: Foster a suitable living environment in communities by improving physical conditions and quality of life
 - C4: End chronic homelessness and move homeless families and individuals to permanent housing
 - C5: Address housing conditions that threaten health
- F. Promote participation of faith-based and community organizations
 - F3: Encourage partnerships between faith-based/community organizations and HUD grantees and subgrantees

State

State of California Department of Housing and Community Development (State of California Department of Housing and Community Development)

- Goal 1: Ensure local governments “take care of their own” by providing an adequate housing supply in an efficient land use pattern while minimizing impacts on valuable habitat and productive farmland.

- Goal 2: Remove barriers to increasing overall housing supply.
- Goal 4: Ensure the safety and health of residents in manufactured housing.
- Goal 5: Strengthen communities by attracting, expanding and retaining business and jobs in California.

California Housing Code, Division 13, Part 1.5 offers regulation for Buildings Used for Human Habitation (State of California Legislative Counsel)

Local

The San Francisco Planning Code describes the use of zoning to protect public health (City and County of San Francisco 2009):

SEC. 101

This City Planning Code is adopted to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare, and for the following more particularly specified purposes:

- (a) To guide, control and regulate future growth and development in accordance with the Master Plan of the City and County of San Francisco;
- (b) To protect the character and stability of residential, commercial and industrial areas within the City, and to promote the orderly and beneficial development of such areas;
- (c) To provide adequate light, air, privacy and convenience of access to property, and to secure safety from fire and other dangers;
- (d) To prevent overcrowding the land and undue congestion of population;
- (e) To regulate the location of buildings and the use of buildings and land adjacent to streets and thoroughfares, in such manner as to obviate the danger to public safety caused by undue interference with existing or prospective traffic movements on such streets and thoroughfares.

Moreover, the Planning Code recognizes the health impacts of alcohol and fast-food establishments and aims in some cases to restrict such land use. Furthermore, in many cases in which land use impacts upon traffic, there is mention of impacts to health, safety, and welfare of residents. In addition, special mention of the importance of affordable housing is described in the Code:

SEC. 315

1. With regard to affordable housing, the city's code refers to statewide goals:

- (a) The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.
- (b) The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.

(c) The provision of housing affordable to low-and moderate-income households requires the cooperation of all levels of government.

(d) Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.

...The 2004 Housing Element of the General Plan recognizes the need to support affordable housing production by increasing site availability and capacity for permanently affordable housing through the inclusion of affordable units in larger housing projects. Further, the City, as established in the General Plan, seeks to encourage the distribution of affordable housing throughout all neighborhoods and, thereby, offer diverse housing choices and promote economic and social integration. The 2004 Housing Element calls for an increase in the production of new affordable housing and for the development of mixed income housing to achieve social and cultural diversity. This legislation furthers the goals of the State Legislature and the General Plan.

Generally, the inclusionary housing requirements for San Francisco residential developments are that 12-15% of units constructed shall be affordable housing depending on factors such as building height. If any existing affordable housing developments are redeveloped, they need to be replaced with a comparable number of bedrooms or have 15% of the new units be affordable, whichever is greater. Moreover, if the requirement is satisfied off-site, then it increases to 17-20% affordable housing units. In some cases, development pays fees to the Citywide Affordable Housing Fund, which shall be used by the Mayor's Office of Housing to increase the supply of affordable housing.

Existing Conditions and Assessment of Redevelopment Impact on Housing Conditions and Health

Below are the results of key informant interviews and the Health and Redevelopment Survey for Bernal Dwellings and North Beach Place.

Housing conditions

Our survey assessed a number of indicators of housing quality, maintenance, and neighborhood/social quality. Generally, the reported quality of the housing at North Beach was better than that of Bernal Dwellings with more respondents at North Beach reporting agreeable levels of housing affordability, sleep at night, quiet, places to exercise, and lighting than at Bernal (Figure 5). Moreover, residents tended to report more agreeable maintenance and housing management at North Beach than at Bernal.

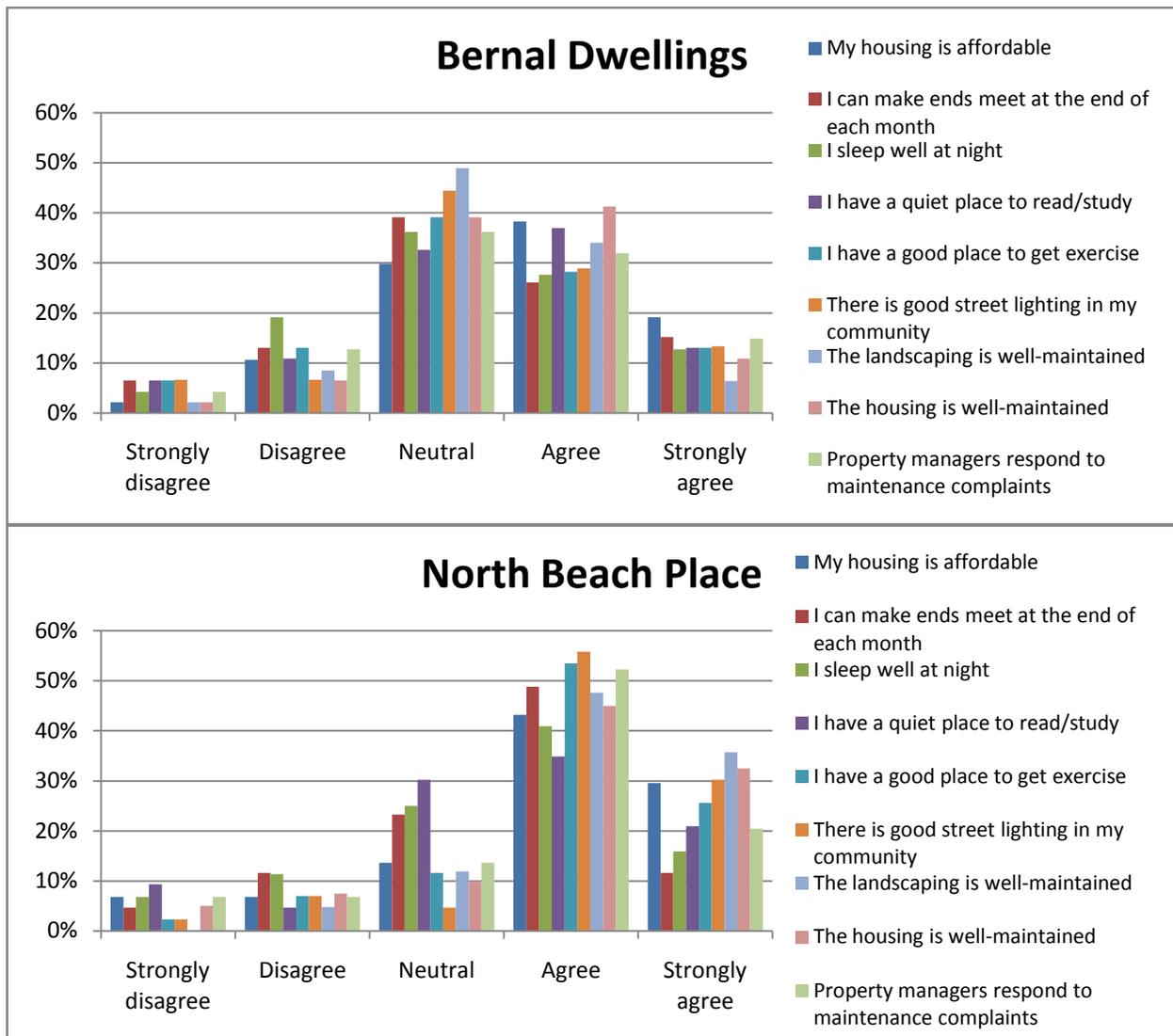


Figure 5. Housing conditions at two HOPE VI sites

The residents’ satisfaction with various aspects of housing was also assessed in our survey (Figure 6). Again, the survey tended to report better conditions at North Beach, with generally a greater proportion of residents responding “very satisfied” with space and privacy, maintenance, affordability, relationship with landlord (housing management), safety, cleanliness, and convenience than at Bernal.

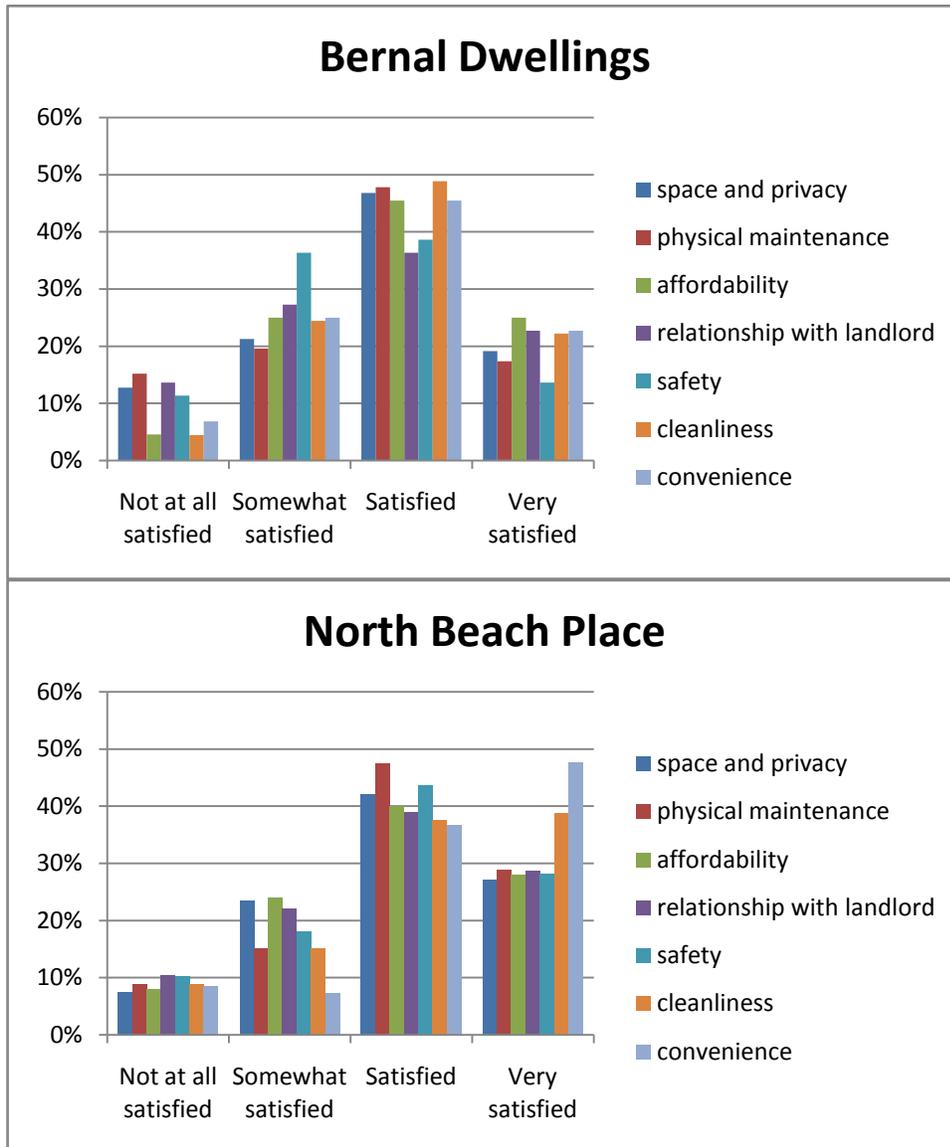


Figure 6. Satisfaction with housing

Despite moderate to good levels of housing satisfaction, in informant interviews, many residents expressed fear of breaking housing rules and its ramifications. This can create mental stress upon residents. When asked about eviction, 26% at Bernal Dwellings and 29% at North Beach Place responded that they were afraid of eviction. Moreover, 16% at Bernal Dwellings and 17% at North Beach Place responded that they have been threatened with eviction in the

past. While we did not ask this, redevelopment may contribute to this stress, since private management may be more likely to enforce rules, and be strict in order to maintain the quality of the redeveloped housing, and to not lose their management contract with the Housing Authority.

When we asked residents to compare their current housing conditions to those present before redevelopment, the majority of respondents said that conditions were better than before (Figure 7). Still, a sizeable proportion of individuals at Bernal (21%) felt that conditions were no different.

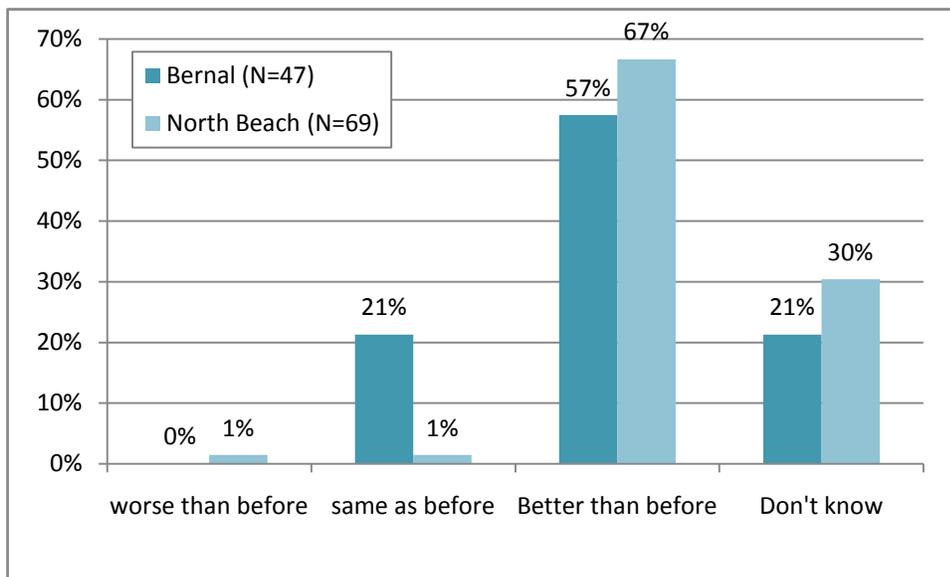


Figure 7. Compared to before redevelopment, how are current housing conditions?

A detailed look survey responses on the presence of building conditions and environmental hazards now and before redevelopment sheds some light how conditions have changed, and also on the need for ongoing maintenance and improvements (Figures 8 and 9). At Bernal Dwellings for instance, generally housing conditions improved, however residents commented that dirty carpets are just as prevalent now as they were before redevelopment (almost a quarter of respondents complained about dirty carpets). Also, more than 1 out of 6 respondents at Bernal reported plumbing problems.

At North Beach Place, the conditions were better than those at Bernal both now and before redevelopment. Yet, slippery surfaces, trash, and dirty carpets were the most-frequent building hazards raised by residents.

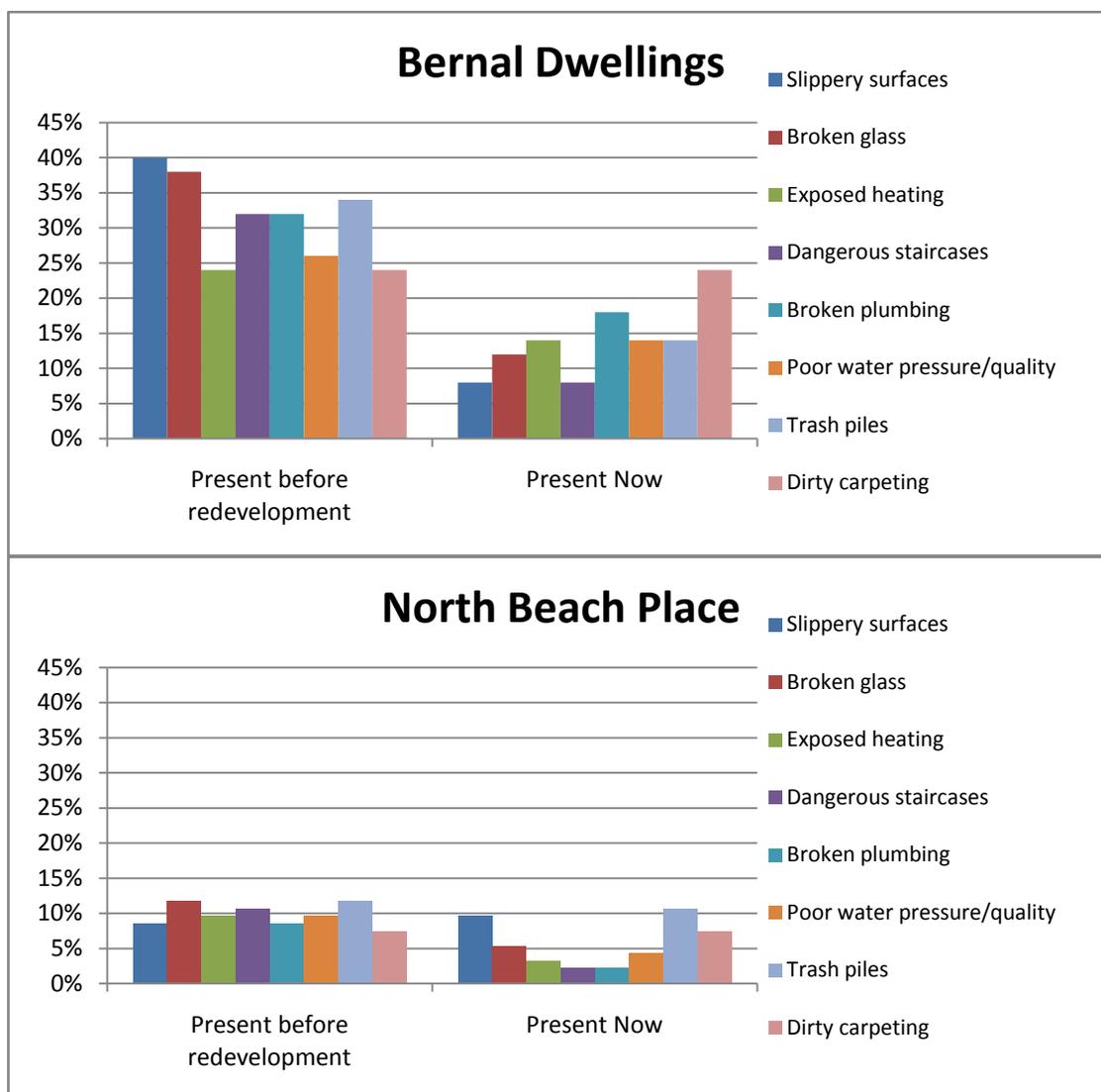


Figure 8. Building conditions before redevelopment and now.

In terms of environmental hazards at Bernal Dwellings, more than a quarter of respondents reported high prevalence of pests (cockroaches, bugs, rats, and mice) as well as dust, noise, and environmental tobacco smoke before development. After redevelopment, most conditions improved, with the exception of some pests (bugs). However, it is troubling that around a quarter of respondents still reported problems with mold, noise, and tobacco smoke – all environmental hazards with well-established evidence of health impacts.

The environmental hazards at North Beach Place were generally better than those at Bernal Dwellings. However, there was not a clear difference between before/after redevelopment as there was with many of the building conditions. For instance, the presence of some pests (bugs) as well as dust, noise, tobacco smoke, and traffic pollution were all reported to be worse than before.

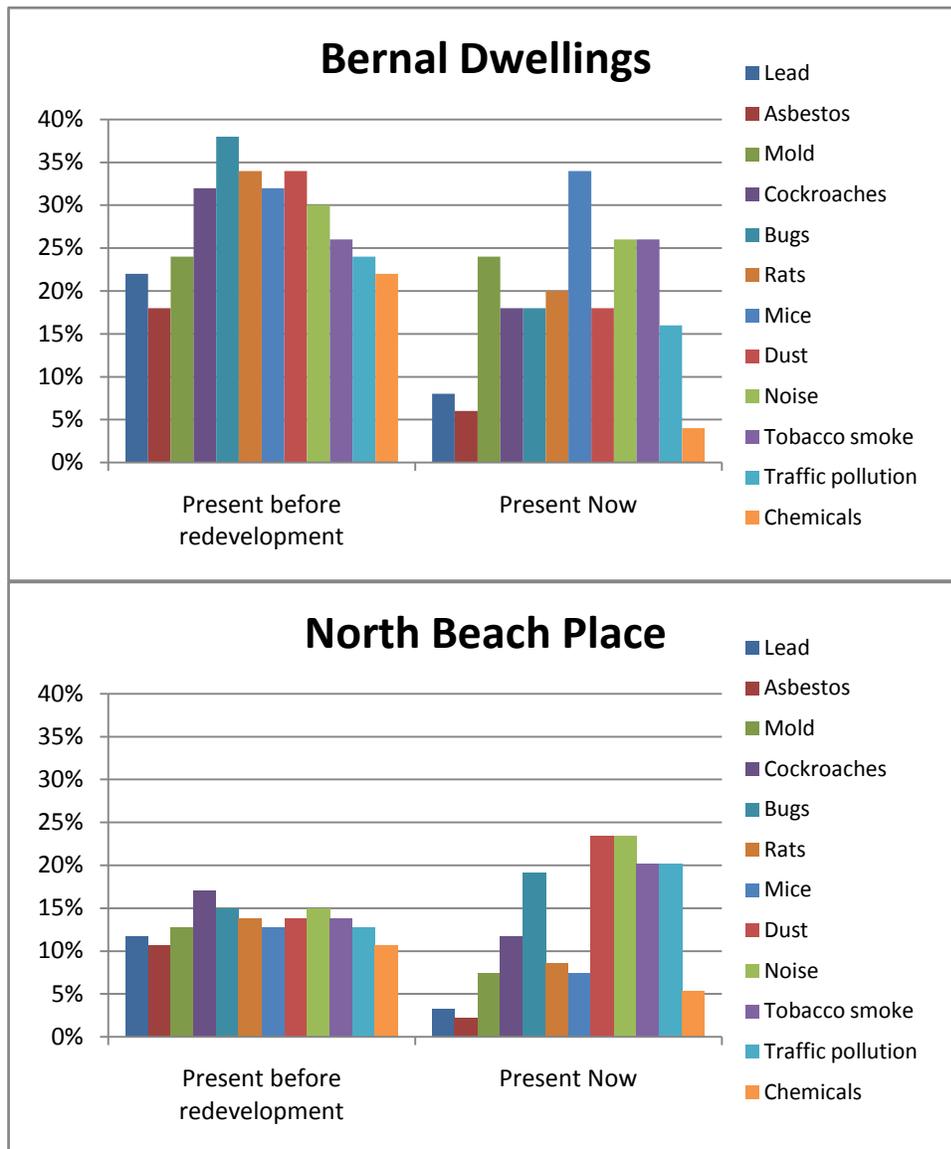


Figure 9. Environmental hazards before redevelopment and now.

From our interviews, it seemed that issues of noise largely related to thin walls and the noise of neighbors. Some at North Beach complained about the abundance of hard building surfaces that reflected noise in the interior courtyard of the complex, and the noise created by children from the childcare facility playground.

Noise and traffic pollution complaints may be associated with the busy streets that are adjacent to each of the developments (Ceasar Chavez for Bernal Dwellings and Bay for North Beach Place). A small number of traffic counts were conducted on each of these streets (six hourly traffic counts conducted morning 7am, noon, and evening 11pm on two separate days) (Table

3). Bernal Dwellings generally had more traffic than North Beach Place. The noise contributions from this traffic were modeled based on the Federal Highway Administration TNM model. Car traffic generally accounted for the most traffic noise, followed by noise from medium trucks. Although noise from motorcycles was not modeled, a fair number of motorcycles were found to pass by during the daytime. Outdoor noise levels (at the sidewalk) were estimated to be between 66-67 dB during the day and 61 dB at night for Bernal Dwellings. At North Beach Place, the outdoor noise levels were estimated to be between 61-63 dB during the day and 57 dB at night. These noise levels are relatively high and may be responsible for annoyance and other noise health impacts.

In terms of traffic-related air pollution, we estimated the fine particulate (PM_{2.5}) emissions from the various traffic sources based on the EMFAC 2007 model, and found that automobiles tended to contribute the most air pollution. At Bernal Dwellings the total emissions for car traffic was on average 2 times greater than that of medium truck traffic and close to 7 times greater than that of heavy truck traffic, while at North Beach Place the total emissions for car traffic was on average 4.5 times greater than that of medium traffic and 6 times greater than that of heavy truck traffic. Our air pollution models estimate that this traffic may elevate background air pollution concentrations by 1-2 $\mu\text{g}/\text{m}^3$. Based on concentration-response relationships between air pollution and health effects, we estimate that this may increase premature mortality by 0.5-0.9%, asthma hospitalization in persons aged ≤ 64 years by 0.3-0.5% and lower respiratory symptoms of persons aged 7-14 years by 1.8-3.6%.

Table 3. Traffic counts at Bernal Dwellings and North Beach Place

Bernal Dwellings (Ceasar Chavez)					
Traffic Counts per hour					
Observation	cars	medium trucks	heavy trucks	buses	motorcycles
Morning	2359	91	7	9	15
Morning	2243	86	9	7	11
Noon	2073	69	6	15	16
Noon	2284	74	7	16	14
Evening	744	8	1	4	7
Evening	756	7	3	5	5

North Beach Place (Bay)					
Traffic Counts per hour					
Observation	cars	medium trucks	heavy trucks	buses	motorcycles
Morning	979	15	1	1	13
Morning	863	17	0	2	14
Noon	985	19	5	3	12
Noon	963	17	6	3	15
Evening	291	1	3	0	3
Evening	265	4	1	0	2

Finally, our survey included the following open-ended questions:

- What do you like the most about your community?
- What would you change about your community?
- If you were here before the redevelopment, what do you think has changed the most because of it?

The responses are presented in the Appendix.

Some of the positive factors associated with each development include the people, the convenience of the location, the safety, the community/youth center, the housing and its affordability. Yet some of the negative factors point to areas, which still need attention, including addressing issues of violence, drug dealing, and providing better security and opportunities for children.

From the responses to “what has changed the most since redevelopment” it seems clear that more than just the buildings have changed. Residents notice changes in crime and safety, social integration, community center, as well as maintenance.

Additional perspectives on the housing environment and its relationship to health are documented from Key Informant Interviews of residents, housing management, and those involved in the redevelopment process, which are summarized in the Appendix.

Conclusions and Recommendations

HOPE VI redevelopment has changed more than just the buildings. Generally, housing conditions, exposures to environmental hazards, and overall satisfaction with living at Bernal Dwellings and North Beach Place have improved.

Despite these improvements, there remain several factors that need attention. At Bernal Dwellings, the major complaints were of pests (bugs), mold, noise, and tobacco smoke. At North Beach Place, the major complaints were of pests (bugs) dust, noise, tobacco smoke, and traffic pollution. Maintenance issues that need attention at Bernal, include dirty carpets and plumbing issues, while at North Beach Place slippery surfaces, trash, and dirty carpets are concerns.

Traffic-related health impacts were estimated from limited traffic counts at both sites. The counts suggest that car traffic is more important at these sites than trucks or bus traffic, and this traffic may be associated with annoyance and respiratory symptoms.

It is important to try and better understand why housing and environmental conditions seem to be better at North Beach Place than at Bernal Dwellings. Some of the difference may have to do with North Beach Place being a newer development, but it may also have to do with better mixed use, social integration, housing design, as well as location. Differences in management companies and their management styles and relationships with residents may also contribute to differing levels of housing satisfaction.

New HOPE SF guidelines explicitly address the need to renovate dilapidated housing. Based on the findings from Bernal Dwellings and North Beach Place, this will result in dramatic improvements in housing quality. However, HOPE SF does not explicitly address how redevelopment could impact the prevalence of existing chronic disease, risk factors, and stress, which are pervasive within public housing.

Recommendations

Recommendations for Bernal Dwellings and North Beach Place

6. Prompt maintenance of worn housing and poor environmental conditions to avoid hazards such as mold, pests, plumbing issues, dirty carpets is needed.
7. Stress levels are high, as are fears of eviction. Housing management should find ways to enforce rules, yet be open to resolving disputes and clarifying matters before eviction.
8. Coordinate better relationships with security/police to improve safety (see **Crime and Safety** Chapter).
9. SF Department of Health and SF Housing Authority should routinely monitor changes in health conditions among public housing residents.

Recommendations for HOPE SF

In addition to consideration of the above issues that have been identified for HOPE VI sites, new redevelopment should consider:

1. Evaluate traffic patterns for noise and air pollution impacts. Determine if traffic management (e.g., traffic calming, truck rerouting) may be useful strategies if significant traffic-related health impacts are likely to occur with redevelopment.
2. Mixed-income developments should ensure quality housing and environmental conditions exist for all levels of income in the redeveloped housing.
3. Consider building materials and ongoing maintenance issues that might lead to future health impacts (use low VOC materials, need for quality plumbing, good noise insulation, avoid carpeting, good ventilation and drainage to avoid mold, food and garbage management to avoid pests).

References

- Acevedo-Garcia, D., T. L. Osypuk, et al. (2004). "Does housing mobility policy improve health?" Housing Policy Debate **15**(1): 49-98.
- Andersson, K., J. V. Bakke, et al. (1997). "TVOC and health in non-industrial indoor environments - Report from a Nordic scientific consensus meeting at Langholmen in Stockholm, 1996." Indoor Air **7**(2): 78-91.
- Bauman, K. E., R. L. Flewelling, et al. (1991). "Parental cigarette smoking and cognitive performance of children." Health Psychol **10**(4): 282-8.
- Berkowitz, G. S., J. Obel, et al. (2003). "Exposure to indoor pesticides during pregnancy in a multiethnic, urban cohort." Environ Health Perspect **111**(1): 79-84.
- Boner, A., L. Pescollderungg, et al. (2002). "The role of house dust mite elimination in the management of childhood asthma: an unresolved issue." Allergy **57 Suppl 74**: 23-31.
- Braubach, M. (2007). "Residential conditions and their impact on residential environment satisfaction and health: Results of the WHO large analysis and review of European housing and health status (LARES) study." International Journal of Environment and Pollution **30**(3-4): 384-403.
- Breyse, P., N. Farr, et al. (2004). "The relationship between housing and health: children at risk." Environ Health Perspect **112**(15): 1583-8.
- Brussee, J. E., H. A. Smit, et al. (2005). "Allergen exposure in infancy and the development of sensitization, wheeze, and asthma at 4 years." J Allergy Clin Immunol **115**(5): 946-52.
- Carter, S. E., E. M. Campbell, et al. (1997). "Environmental hazards in the homes of older people." Age Ageing **26**(3): 195-202.
- Centers for Disease Control and Prevention (2005). Unintentional non-fire-related carbon monoxide exposures -- United States, 2001-2003. Atlanta, GA, U.S. Department of Health and Human Services.
- Centers for Disease Control and Prevention and U.S. Department of Housing and Urban Development (2006). Healthy housing reference manual. Atlanta, US Department of Health and Human Services.
- Chanda, S. M. and C. N. Pope (1996). "Neurochemical and neurobehavioral effects of repeated gestational exposure to chlorpyrifos in maternal and developing rats." Pharmacol Biochem Behav **53**(4): 771-6.
- Chew, G. L., M. S. Perzanowski, et al. (2008). "Cockroach allergen levels and associations with cockroach-specific IgE." J Allergy Clin Immunol **121**(1): 240-5.
- City and County of San Francisco. (2009). "CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL CODE PLANNING CODE." Retrieved August 15, 2009, from <http://www.municode.com/Resources/gateway.asp?pid=14139&sid=5>.
- Cole Johnson, C., D. R. Ownby, et al. (2004). "Family history, dust mite exposure in early childhood, and risk for pediatric atopy and asthma." J Allergy Clin Immunol **114**(1): 105-10.
- Darby, S., D. Hill, et al. (2005). "Radon in homes and risk of lung cancer: collaborative analysis of individual data from 13 European case-control studies." BMJ **330**(7485): 223.
- Digenis-Bury, E. C., D. R. Brooks, et al. (2008). "Use of a Population-Based Survey to Describe the Health of Boston Public Housing Residents." **98**(1): 85.

- Douwes, J. (2005). "(1-->3)-Beta-D-glucans and respiratory health: a review of the scientific evidence." Indoor Air **15**(3): 160-9.
- Elender, F., G. Bentham, et al. (1998). "Tuberculosis mortality in England and Wales during 1982-1992: its association with poverty, ethnicity and AIDS." Soc Sci Med **46**(6): 673-81.
- Ellen, I. G., T. Mijanovich, et al. (2001). "Neighborhood effects on health: Exploring the links and assessing the evidence." Journal of Urban Affairs **23**(3-4): 391-408.
- Eskenazi, B., A. W. Prehn, et al. (1995). "Passive and active maternal smoking as measured by serum cotinine: the effect on birthweight." Am J Public Health **85**(3): 395-8.
- Evans, G. W. (2006). "Child development and the physical environment." Annu Rev Psychol **57**: 423-51.
- Fergusson, D. M., L. J. Horwood, et al. (1993). "Maternal smoking before and after pregnancy: effects on behavioral outcomes in middle childhood." Pediatrics **92**(6): 815-22.
- Fertig, A. R. and D. A. Reingold (2007). "Public housing, health and health behaviors: is there a connection?" J Policy Anal Manage **26**(4): 831-59.
- Garcia, D. P., M. L. Corbett, et al. (1994). "Cockroach allergy in Kentucky: a comparison of inner city, suburban, and rural small town populations." Ann Allergy **72**(3): 203-8.
- Goering, J. and J. D. Feins (2003). Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment. Washington, DC, Urban Institute Press.
- Hawker, J. I., S. S. Bakhshi, et al. (1999). "Ecological analysis of ethnic differences in relation between tuberculosis and poverty." BMJ **319**(7216): 1031-4.
- Health Effects Institute (2009). Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects. Boston, MA.
- Huss, K., N. F. Adkinson, Jr., et al. (2001). "House dust mite and cockroach exposure are strong risk factors for positive allergy skin test responses in the Childhood Asthma Management Program." J Allergy Clin Immunol **107**(1): 48-54.
- Illi, S., E. von Mutius, et al. (2006). "Perennial allergen sensitisation early in life and chronic asthma in children: a birth cohort study." Lancet **368**(9537): 763-70.
- Institute of Medicine (2000). Clearing the Air: Asthma and Indoor Air Exposures. Washington, DC, National Academy Press.
- Istre, G. R., M. A. McCoy, et al. (2001). "Deaths and injuries from house fires." N Engl J Med **344**(25): 1911-6.
- Jacobs, D. E., R. P. Clickner, et al. (2002). "The prevalence of lead-based paint hazards in U.S. housing." Environ Health Perspect **110**(10): A599-606.
- Jacobs, D. E., J. Wilson, et al. (2009). "The relationship of housing and population health: a 30-year retrospective analysis." Environ Health Perspect **117**(4): 597-604.
- Kawachi, I. o. and L. F. Berkman (2003). Neighborhoods and health. Oxford ; New York, Oxford University Press.
- Krewski, D., J. H. Lubin, et al. (2006). "A combined analysis of North American case-control studies of residential radon and lung cancer." J Toxicol Environ Health A **69**(7): 533-97.
- Krieger, J. and D. L. Higgins (2002). "Housing and health: time again for public health action." Am J Public Health **92**(5): 758-68.
- Leventhal, T. and J. Brooks-Gunn (2003). "Moving to opportunity: an experimental study of neighborhood effects on mental health." Am J Public Health **93**(9): 1576-82.

- Litonjua, A. A., V. J. Carey, et al. (2001). "Exposure to cockroach allergen in the home is associated with incident doctor-diagnosed asthma and recurrent wheezing." J Allergy Clin Immunol **107**(1): 41-7.
- Manjarrez, C., S. J. Popkin, et al. (2007). *Poor Health: Adding Insult to Injury for HOPE VI Families*. Washington, DC, Urban Institute Metropolitan Housing and Communities Center.
- Marshall, S. W., C. W. Runyan, et al. (2005). "Prevalence of selected risk and protective factors for falls in the home." Am J Prev Med **28**(1): 95-101.
- Matsui, E. C., R. A. Wood, et al. (2003). "Cockroach allergen exposure and sensitization in suburban middle-class children with asthma." J Allergy Clin Immunol **112**(1): 87-92.
- Matte, T. D. and D. E. Jacobs (2000). "Housing and health - Current issues and implications for research and programs." Journal of Urban Health-Bulletin of the New York Academy of Medicine **77**(1): 7-25.
- Morland, K., S. Wing, et al. (2002). "Neighborhood characteristics associated with the location of food stores and food service places." Am J Prev Med **22**(1): 23-9.
- Mudarri, D. and W. J. Fisk (2007). "Public health and economic impact of dampness and mold." Indoor Air **17**(3): 226-35.
- National Center for Healthy Housing (2009). *Housing Interventions and Health: A Review of the Evidence*. Columbia, Maryland.
- National Safety Council (2003). *Injury Facts, 2003 edition*. Itasca, IL, National Safety Council.
- Orr, L., J. D. Feins, et al. (2003). *Moving to Opportunity Interim Impacts Evaluation*. Washington, DC, U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- Passchier-Vermeer, W. and W. F. Passchier (2000). "Noise exposure and public health." Environ Health Perspect **108 Suppl 1**: 123-31.
- Phipatanakul, W., P. A. Eggleston, et al. (2000). "Mouse allergen. I. The prevalence of mouse allergen in inner-city homes. The National Cooperative Inner-City Asthma Study." J Allergy Clin Immunol **106**(6): 1070-4.
- Phipatanakul, W., P. A. Eggleston, et al. (2000). "Mouse allergen. II. The relationship of mouse allergen exposure to mouse sensitization and asthma morbidity in inner-city children with asthma." J Allergy Clin Immunol **106**(6): 1075-80.
- Pickett, K. E. and M. Pearl (2001). "Multilevel analyses of neighbourhood socioeconomic context and health outcomes: a critical review." J Epidemiol Community Health **55**(2): 111-22.
- Platts-Mills, T. A. and E. B. Mitchell (1982). "House dust mite avoidance." Lancet **2**(8311): 1334.
- Popkin, S. J., B. Katz, et al. (2004). *DECADE OF HOPE VI: Research Findings and Policy Challenges*, The Urban Institute, The Brookings Institution.
- Rice, D. and S. Barone, Jr. (2000). "Critical periods of vulnerability for the developing nervous system: evidence from humans and animal models." Environ Health Perspect **108 Suppl 3**: 511-33.
- Rosenstreich, D. L., P. Eggleston, et al. (1997). "The role of cockroach allergy and exposure to cockroach allergen in causing morbidity among inner-city children with asthma." N Engl J Med **336**(19): 1356-63.

- Saegert, S. C., S. Klitzman, et al. (2003). "Healthy housing: a structured review of published evaluations of US interventions to improve health by modifying housing in the United States, 1990-2001." Am J Public Health **93**(9): 1471-7.
- Sallis, J. F., T. L. McKenzie, et al. (1997). "Factors parents use in selecting play spaces for young children." Arch Pediatr Adolesc Med **151**(4): 414-7.
- Samet, J. M. (2006). "Residential radon and lung cancer: end of the story?" J Toxicol Environ Health A **69**(7): 527-31.
- Samet, J. M. and M. L. Bell (2004). "Commentary: nitrogen dioxide and asthma redux." Int J Epidemiol **33**(1): 215-6.
- Samet, J. M. and M. J. Utell (1990). "The risk of nitrogen dioxide: what have we learned from epidemiological and clinical studies?" Toxicol Ind Health **6**(2): 247-62.
- Sandel, M., J. Sharfstein, et al. (1999). *There's no place like home: How America's housing crisis threatens our children*. D. K. p. a. H. America. San Francisco.
- State of California Department of Housing and Community Development. "Mission: Strategic Plan and Performance Management System." Retrieved December 11, 2006, from <http://www.hcd.ca.gov/mission.html>.
- State of California Legislative Counsel. "Official California Legislative Information." Retrieved December 11, 2006, from <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=17001-18000&file=17920-17927>.
- U.S. Fire Administration (2006). *Home fire safety: On the safety circuit: A factsheet on home electrical fire prevention*, U.S. Department of Homeland Security.
- United Nations Conference on Human Settlements (Habitat II) (1996). *The Habitat Agenda - Istanbul Declaration on Human Settlements*. Istanbul.
- United States Department of Health and Human Services. "Healthy People 2010, Objectives for Improving Health (Part A: Focus Areas 1-14)." Retrieved December 11, 2006, from <http://www.healthypeople.gov/document/tableofcontents.htm#parta>.
- United States Department of Housing and Urban Development. (HUD Strategic Plan. FY 2006-2011). Retrieved November 29, 2006, from http://www.hud.gov/offices/cfo/reports/hud_strat_plan_2006-2011.pdf.
- W.H.O. (2004). *Fourth Ministerial Conference on Environment and Health: Review of evidence on housing and health*. Budapest, Hungary.
- Walinder, R., L. Ernstgard, et al. (2005). "Acute effects of a fungal volatile compound." Environ Health Perspect **113**(12): 1775-8.
- Whyatt, R. M., D. E. Camann, et al. (2002). "Residential pesticide use during pregnancy among a cohort of urban minority women." Environ Health Perspect **110**(5): 507-14.
- Williams, G. M., M. O'Callaghan, et al. (1998). "Maternal cigarette smoking and child psychiatric morbidity: a longitudinal study." Pediatrics **102**(1): e11.

Displacement

Questions for HIA

- How does displacement due to public housing redevelopment impact health outcomes?
- How does displacement impact affordable housing options?
- How does displacement impact levels of residential segregation?
- What is the process of provisions of housing vouchers to displaced residents? Is this process equitable?
- What cities/regions are residents relocating?
- How does displacement impact social capital?
- What are the levels of stress anxiety for residents that have relocated compared to those who have stayed/returned?

Background

Displacement, in a broad sense, is defined as residential or commercial relocation (Koebel 1996). Redevelopment may directly or indirectly result in displacement of residents, jobs, and/or services. There are four main types of displacement:

- Direct residential displacement occurs when current residents must move because their homes, usually rental properties, are being redeveloped
- Indirect residential displacement occurs when current residents must move because their homes become unaffordable, due to increased property taxes or rent
- Direct commercial displacement occurs when shops are replaced by chain stores or new buildings
- Indirect commercial displacement occurs when shops are forced to close because of unaffordable leases, decrease in clientele, or the inability to compete with new stores (2007).



Luxury (Dalen 1987)

Historically, there have been five periods of residential displacement in the contemporary United States: slum clearance (1945-1954); clearance for public housing, commerce, and market-rate housing (1955-1963); national promotion of social change and the neighborhood movement (1964-1974); redevelopment of central business districts (1975-1984); and the retreat of the federal government from cities or disinvestment (1985-) (Koebel 1996). Currently, the forces of gentrification, evictions, and foreclosures are fueling displacement (Manchanda 2008, Right to the City 2010).

According to current federal policies, low-income residents who are displaced are given preference in public housing and other federally-assisted housing. Also, any federally-assisted housing complexes undergoing redevelopment must be replaced on a one-for-one basis (Koebel 1996). For HOPE VI redevelopment, tenants received relocation assistance and Section 8 vouchers to subsidize their rent in the private market while their public housing complexes were redeveloped as mixed-income housing complexes (Tracy 2008). However, families reported facing challenges in finding units and negotiating with landlords in the private markets, or feeling rushed by relocation staff to take any available unit, sometimes resulting in moving to poor-quality housing (Comey 2007). In theory, after HOPE VI redevelopment, the original tenants would then be able to return to their refurbished homes and enjoy a wide range of social and economic programs designed to ease the transition from welfare to work (Tracy 2008). As of 2004, approximately 49,000 residents from across the United States have been relocated from HOPE VI properties (Popkin, Katz et al. 2004). Also by 2004, 49,828 units had been demolished, but only 21,000 units had been rebuilt (Popkin, Katz et al. 2004). The information on the outcomes of the original HOPE VI residents has been limited and inconsistent. Assessments reveal wide variation in the numbers of returning tenants, depending on the characteristics of new development. Developments that remained 100 percent public housing had larger numbers of returning tenants, while the numbers returning to developments that had become mixed-income were substantially smaller, averaging below 50 percent (Popkin, Katz et al. 2004). However, in a national survey which asked residents about their desire to return, most responded that they would like to return to their original sites once completed (Popkin, Katz et al. 2004). Researchers, policy analysts, and community

advocates have found that what usually happened was that reconstruction became delayed or abandoned, and the mixed-income residency requirements left the most low-income tenants unable to return or caused them to lose their homes (Tracy 2008).

Evidence on the relationship between Displacement and Health

Involuntary residential displacement causes short- and long-term health effects. Some human rights activists refer to housing as healthcare (Manchanda 2008). Unaffordable housing as a result of displacement may cause many families to have to choose between other basic necessities such as food and clothing (Great Communities Collaborative, 2007). Likewise, sub-standard housing and overcrowding as a result of displacement can cause increased risk for infections (2007). The HOPE VI Panel Study found worsening health and high mortality rate for HOPE VI residents before and during relocation (Manjarrez, Popkin et al. 2007).

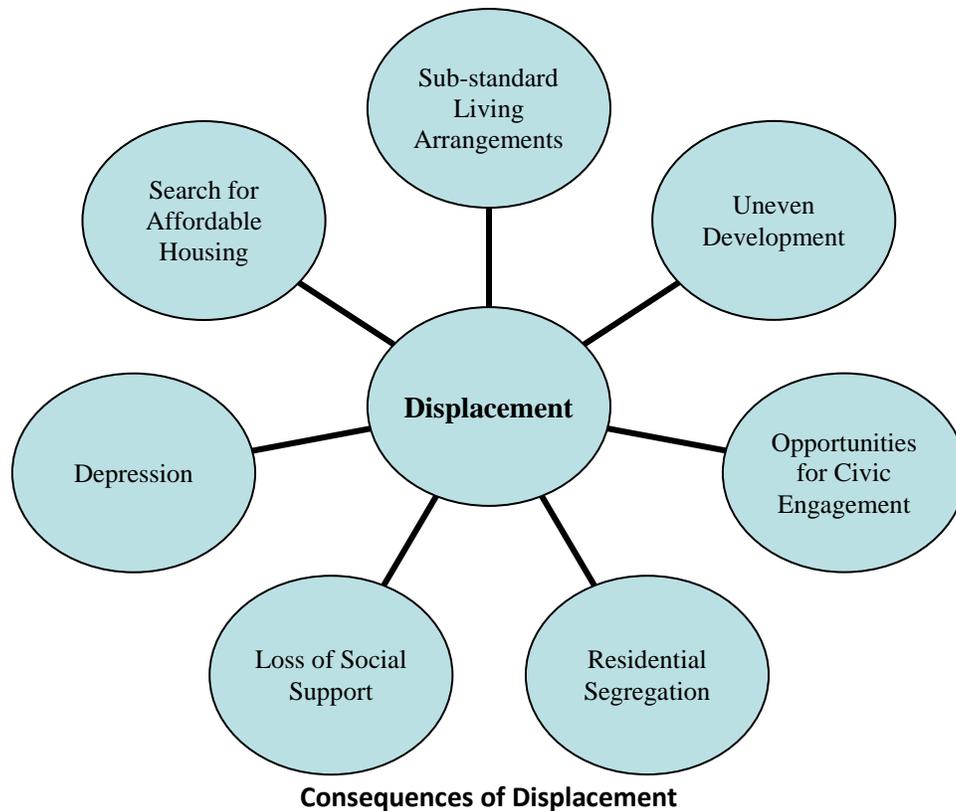
Having to relocate from one's home can also be stressful and even traumatic. Residential instability and mobility for children and adolescents has been linked to depression (Dong, Anda et al. 2005). Displaced residents who must relocate outside of their neighborhoods may lose valuable supportive family and community relationships. Strong social networks and relationships have been found to be protective health factors (*more in-depth information on the impacts of these social support networks can be found in the **Social Cohesion** Chapter*). Place attachment refers to people's emotional bonds with places (Kleit and Manzo 2006). Place attachment is measured by the social ties, length of residence, and level of engagement in neighborhood activities (Kleit and Manzo 2006). Displacement and relocation disrupts place attachment. Research has shown that public housing residents, particularly those that have lived longest in public housing have the strongest bonds with people and place (Kleit and Manzo 2006) and that their social capital is spatially specific (Clampet-Lundquist 2004). Studies have found that during relocation, neither residents who have moved to other public housing or used Section 8 vouchers to move have been able rebuild the social ties that they once had in their old neighborhoods and are often unable to take part in the local social structures (Clampet-Lundquist 2004). The nature of place attachment has often been ignored in HOPE VI research and planning efforts although well-being is an intended outcome of housing reform (Manzo, Kleit et al. 2008).

Unlike place-based community development efforts which results in involuntary residential displacement, mobility programs enable low-income, mostly residents of color to voluntarily leave high-poverty, most nonwhite neighborhoods and relocate to more racially and economically integrated neighborhoods (Briggs 1997). Proponents of such programs believe that the move will afford better employment and educational opportunities of the relocated families, as well as less fear of crime. Such beliefs led the Bush administration to authorize and the Clinton administration to implement the Moving to Opportunity for Fair Housing Demonstration (MTO)—a tenant mobility initiative launched in five U.S. cities (Baltimore, Boston, Chicago, Los Angeles, and New York City) (Leventhal and Brooks-Gunn 2003). MTO's randomized design placed families residing in public housing in high-poverty neighborhoods and who had children between one and 18 years of age into one of three categories: 1) the

experimental group, whose members received Section 8 housing vouchers and counseling assistance to move only to low-poverty neighborhoods (< 10% poor according to the 1990 US Census); 2) the comparison group, whose members received Section 8 housing vouchers to move to any neighborhood of their choice; or 3) the control group, whose members did not receive vouchers but continued to receive project-based assistance (Leventhal and Brooks-Gunn 2003).

Most of the families who volunteered for MTO cited a desire to move away from drugs and gangs as their primary reason for wanting to relocate (Leventhal and Brooks-Gunn 2003). Parents in the experimental group reported fewer distress and depressive symptoms than parents who remained in high-poverty neighborhoods. However, the mental health impacts of MTO were much larger for children than for parents. Among boys aged 8 to 13, relocating to private housing in low-poverty neighborhoods resulted in a 25% reduction in depression and anxiety problems (Leventhal and Brooks-Gunn 2003). Similarly, younger children are found to benefit greatly from their parents' superior mental health (Leventhal and Brooks-Gunn 2003). The lack of findings for girls may speak to the phenomenon that parents and schools may provide boys greater access to neighborhood effects, whereas girls' exposure may be more restricted.

Critics of such mobility programs call upon the assumptions that employment opportunities for the movers will exist in the new neighborhoods, and that the movers' service and recreational needs will be available in the new neighborhoods (Briggs 1997). Adults who moved to low-poverty neighborhoods were less likely to socialize informally with neighbors than those who stayed in high-poverty neighborhoods (Fauth, Leventhal et al. 2004). Similarly, the absence of general findings on the outcomes for youths aged 14 to 18 years may result from adolescents' ability to travel back to their old neighborhoods particularly to reconnect to their former peer networks. In fact, research on residential mobility indicates that such instability may have negative health effects due to the disturbance of social networks (Leventhal and Brooks-Gunn 2003).



Standards

California Redevelopment Law (2009), Section 33413 (a) requires that whenever dwelling units housing low- or moderate-income persons or families are destroyed or removed as part of a redevelopment project, the agency shall, within four years, develop or cause to be developed an equal number of replacement dwelling units, with an equal or greater number of bedrooms, at affordable housing costs to households of low- or moderate-income.

The US Department of Housing and Urban Development (United States Department of Housing and Urban Development HUD Strategic Plan. FY 2006-2011) has the following objectives related to displacement:

- A. Increase homeownership opportunities
- B. Promote decent affordable housing
- C. Strengthen communities
- F. Promote participation of faith-based and community organizations

State of California Department of Housing and Community Development (State of California Department of Housing and Community Development)

- Goal 1: Ensure local governments “take care of their own” by providing an adequate housing supply in an efficient land use pattern while minimizing impacts on valuable habitat and productive farmland.
- Goal 2: Remove barriers to increasing overall housing supply.

The San Francisco Planning Code describes the use of zoning to protect public health (City and County of San Francisco 2009):

SEC. 101

- (b) To protect the character and stability of residential, commercial and industrial areas within the City, and to promote the orderly and beneficial development of such areas;
- (d) To prevent overcrowding the land and undue congestion of population;

SEC. 315

1. With regard to affordable housing, the city’s code refers to statewide goals:
- (a) The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.
- (b) The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.
- (c) The provision of housing affordable to low-and moderate-income households requires the cooperation of all levels of government.
- (d) Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.

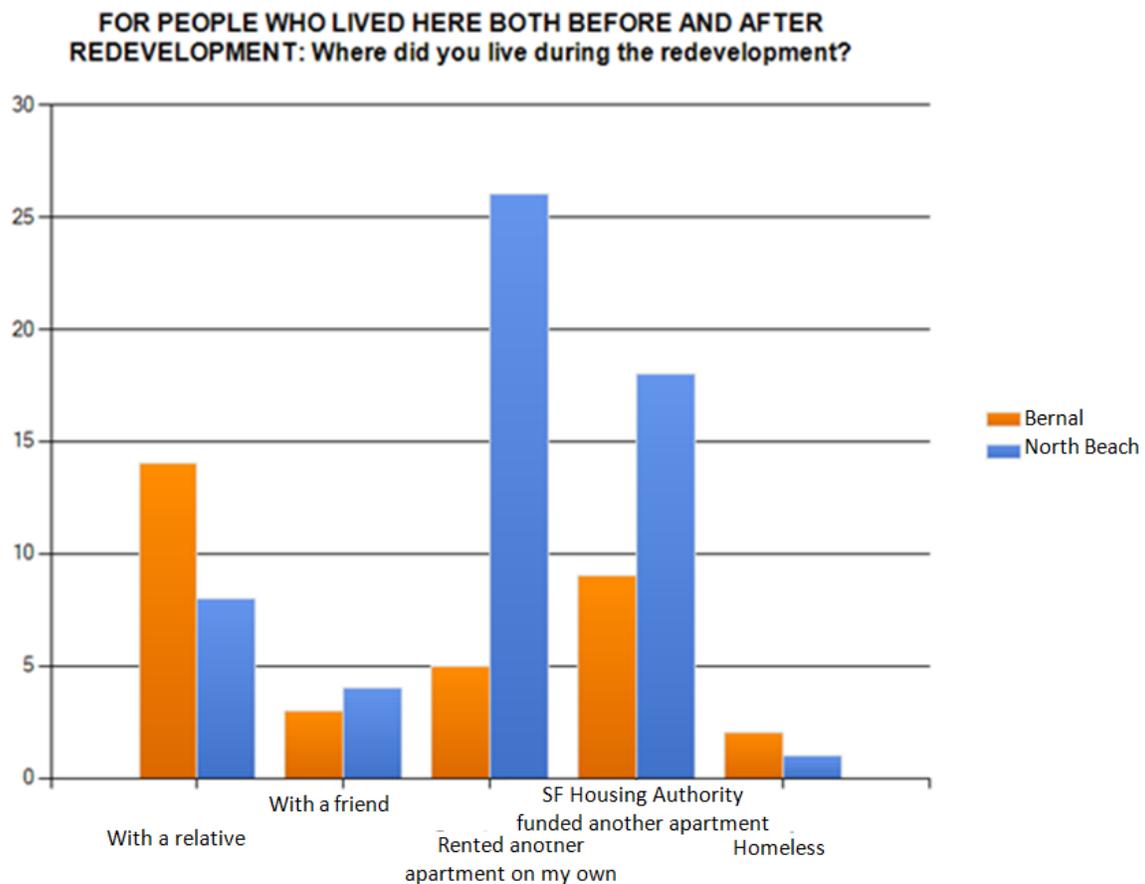
...The 2004 Housing Element of the General Plan recognizes the need to support affordable housing production by increasing site availability and capacity for permanently affordable housing through the inclusion of affordable units in larger housing projects. Further, the City, as established in the General Plan, seeks to encourage the distribution of affordable housing throughout all neighborhoods and, thereby, offer diverse housing choices and promote economic and social integration. The 2004 Housing Element calls for an increase in the production of new affordable housing and for the development of mixed income housing to achieve social and cultural diversity. This legislation furthers the goals of the State Legislature and the General Plan.

Existing Conditions and Assessment of Redevelopment Impact on Displacement

We summarize literature, and the results of our key informant interviews and Health and Redevelopment survey below.

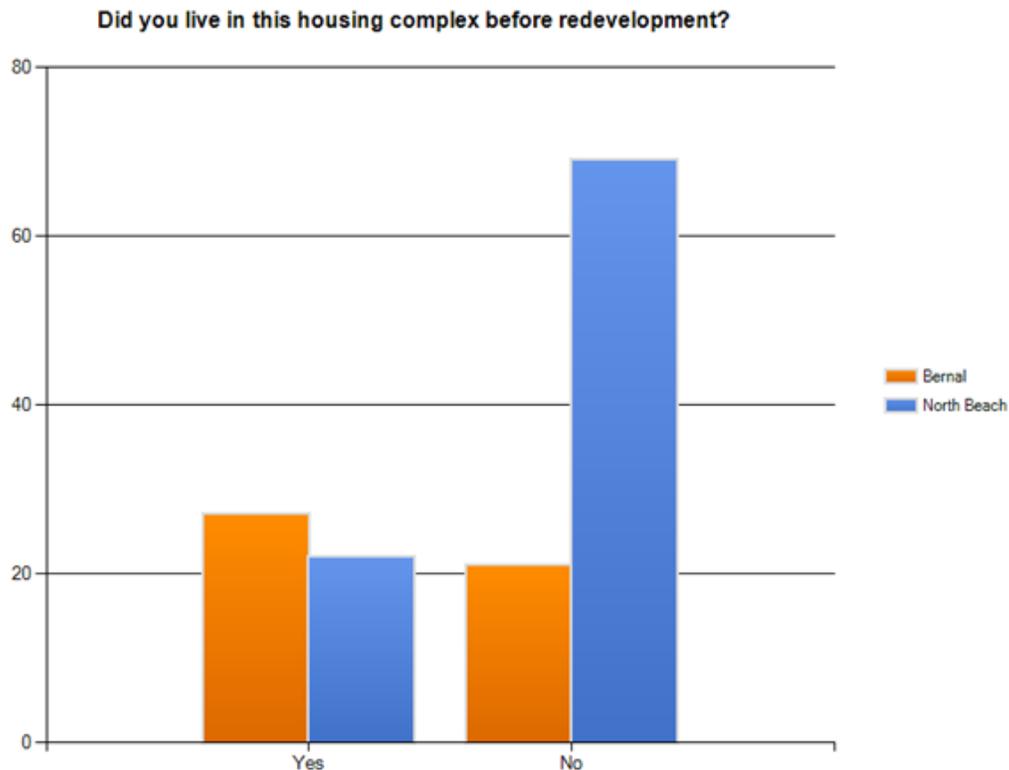
Returning Populations after HOPE VI Redevelopment

For those residents who were displaced during redevelopment but returned after, most of the Bernal Dwelling residents relocated to the East Bay (e.g., Oakland, Richmond, Hayward, etc.) and lived with relatives, or moved to another public housing complex in San Francisco. The East Bay was described as being quieter than San Francisco: *“Being in Oakland was calmer...quieter. No guns.”* In North Beach Place, displacement during the redevelopment occurred because the original promise to build in two phases was not carried out. Residents were supposed to move into one side of the complex while the other side was being built. This did not occur, however, and residents had to relocate. North Beach residents rented in the private market with Section 8 vouchers, with a lot of assistance from relocation counselors, or also relocated to another SF public housing complex. Though many of the key informants reported liking Section 8 housing, some had jobs that were located near North Beach Place. When they were displaced, they had to take long bus routes from their new places of residence to their jobs, some even as far away as the Potrero Hill neighborhood, taking almost an hour each way via public transportation. Some residents from both sites did share that they were left homeless during the redevelopment period.



Of our survey’s respondents, most of the current residents in North Beach Place did not live there before redevelopment, so are new to this complex. Prior to coming to North Beach, most of these resident rented in the private market. However, an equal amount of current residents

in Bernal Dwellings lived there before redevelopment (“returners”) compared to those who moved there after redevelopment. Overall, displaced residents and new residents were eager to move to the new Bernal Dwellings. *“Most people have changed their lives so that they could come back here. They want to do better, and they were forced to do better.”* And: *“We wanted to come back because it was new and looked nice.”*



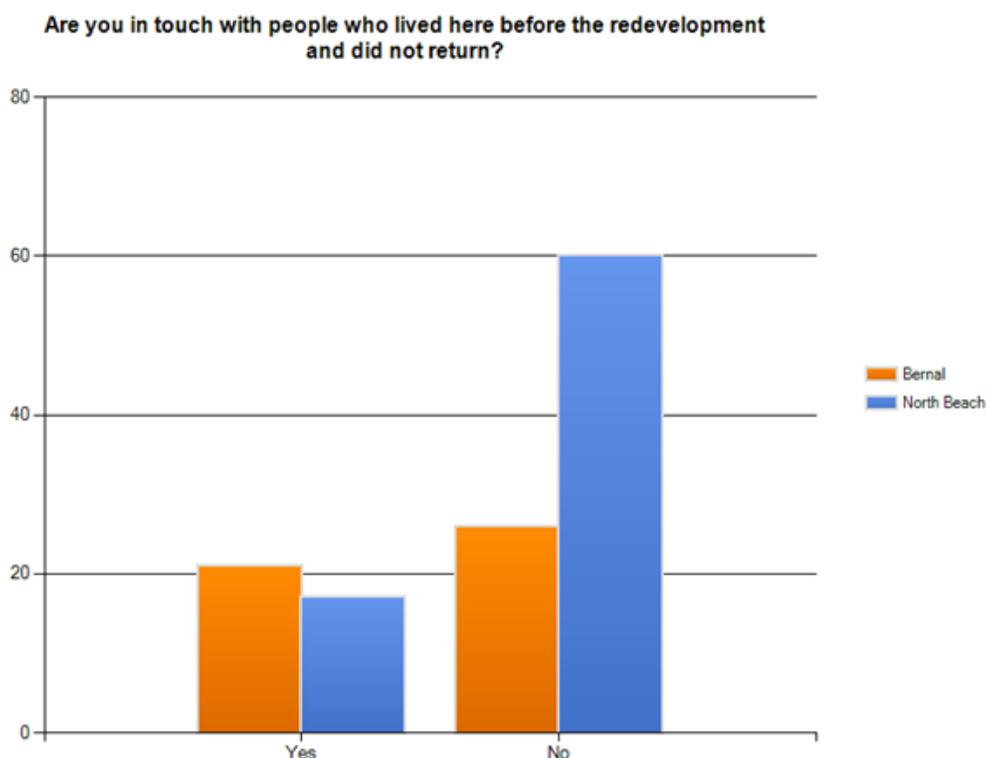
Social Networks

During redevelopment, relatives and close friends were scattered throughout the greater Bay Area. Long commutes made getting together harder. They tried to keep in touch with friends every once in a while, and saw relatives mostly on holidays. A couple of interviewees moved to public housing in the Potrero Hill and Bayview Hunters Point neighborhoods of San Francisco and remarked about the hassle of being displaced: *“It was hell moving away...I had to switch schools for the kids so that the schools would be closer, but they didn’t want to switch schools...It was a really hard adjustment to the new school and my kids acted out because of it. It really strained our relationship.”*

About 20% of our survey’s respondents currently living in Bernal Dwellings are still in touch with residents who relocated and did not return. Conversely, About 60% of our survey’s respondents currently living in North Beach Place are not in touch with residents who previously lived there and did not return. *“A lot of people couldn’t come back because they had a record...A lot of people moved out of the city and didn’t come back. [Redevelopment]”*

displaced the community. I would also have equal amount of housing [built]; I think we lost 30 apartments.”

Social networks have undoubtedly shifted in both sites. It is important to continue to assess the impact of this disruption.



Physical and Mental Health Issues

Most of our survey’s respondents in both sites contend with chronic diseases such as asthma, diabetes, and hypertension (Figure of health conditions presented in **Healthy Housing** Chapter). Additionally, a majority of the residents responded suffering from anxiety and stress (*more in-depth information some of the causal pathways of anxiety and stress are discussed in the **Social Cohesion and Crime and Safety** Chapters*). One key informant remarked, “When we moved I was diagnosed with major depression and bipolar [disorder]. I don’t know if it was connected to the move, but I noticed it after I moved. It affected my mood.” Residents experienced stress when they had to move to other housing during redevelopment, find schools for the children, and live away from their community. Additionally, they experienced stress when they had to move back and re-integrate into the neighboring community.

Prior research has found an association between displacement, relocation, and disrupted social networks and mental health issues. Stress and anxiety have been found to exacerbate chronic disease outcomes. For these reasons, it is important to further study the impact of

redevelopment on the physical and mental health of residents in order to prevent or manage deleterious outcomes.

Conclusions and Recommendations

Residential displacement has been a documented problem with HOPE VI redevelopment. Displacement has both short and long-term health effects. The short-term effects are the stress of relocation and the concern of not being able to return to the housing site. The longer term impacts are disruption of social networks and place attachment. However, there is some evidence that suggests relocation into low-poverty neighborhoods may have health benefits to certain subpopulations.

We were not able to find those people displaced from North Beach Place and Bernal Dwellings. However, in interviewing some of the residents who did return, we found that many had temporarily relocated to the East Bay and made use of rental vouchers, though some stated that they were left homeless. Interviews suggested that social networks were impacted by the physical distance created through displacement. After redevelopment, the lower number of public housing units, as well as reentry requirements, may have contributed to displacement. Better monitoring of the fate of public housing residents through the displacement process is needed, particularly to track longer term health outcomes.

Recommendations

- Assess what types of resources residents most need to be able to temporarily or permanently relocate due to redevelopment. e.g., some who have lived entirely within public housing may not be familiar with the rental process (application forms, background checks, use of vouchers, deposits, etc.), and may need assistance to compete effectively to find good rental opportunities in the market.
- Do more extensive outreach to provide education about the various housing options available during relocation
- Turn around vacant units quickly so that more public housing units are available as an option for relocation
- Look for opportunities to expand rather than redevelop public housing
- Provide better and more comprehensive support for families as they undergo the stress of involuntary relocation
- Provide effective case management particularly for older and more vulnerable residents, who are more likely to be impact disproportionately from displacement
- Connect relocators to culturally- and age-appropriate institutions in their new neighborhoods

- Provide culturally- and age-appropriate focus groups, talking circles, and mental health resources for residents to discuss their experiences about being displaced and to seek appropriate care

References

- Great Communities Collaborative (2007). Preventing Displacement Policy Fact Sheet.
- Briggs, X. d. S. (1997). "Moving Up Versus Moving Out: Neighborhood Effects in Housing Mobility Programs." Housing Policy Debate **8**(1): 195-234.
- California Redevelopment Law (Accessed 2009) (Available at: <http://www.hcd.ca.gov/hpd/rda/rdalaw.html>)
- City and County of San Francisco. (2009). "CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL CODE PLANNING CODE." Retrieved August 15, 2009, from <http://www.municode.com/Resources/gateway.asp?pid=14139&sid=5>.
- Clampet-Lundquist, S. (2004). "HOPE VI Relocation: Moving to New Neighborhoods and Building New Ties." Housing Policy Debate **15**(2): 415-447.
- Comey, J. (2007). HOPE VI'd and On the Move, The Urban Institute.
- Dalen, A. V. (1987). *Luxury*. New York, Lower East Side Printshop.
- Dong, M., R. F. Anda, et al. (2005). "Childhood Residential Mobility and Multiple Health Risks During Adolescence and Adulthood." Arch Pediatr Adolesc Med **159**: 1104-1110.
- Fauth, R. C., T. Leventhal, et al. (2004). "Short-term effects of moving from public housing in poor to middle-class neighborhoods on low-income, minority adults' outcomes." Social Science & Medicine **59**: 2271-2284.
- Kleit, R. G. and L. C. Manzo (2006). "To Move or Not to Move: Relationships to Place and Relocation Choices in HOPE VI." Housing Policy Debate **17**(2): 271-308.
- Koebel, C. T. (1996). *Urban Redevelopment, Displacement, and the Future of the American City*, The Federal Reserve Bank of Richmond.
- Leventhal, T. and J. Brooks-Gunn (2003). "Moving to Opportunity: an Experimental Study of Neighborhood Effects on Mental Health." American Journal of Public Health **93**(9): 1576-1582.
- Manchanda, R. (2008). *Taming the Perfect Storm: Addressing the Impact of Public Health, Housing, and Law Enforcement Policies on Homelessness and Health in South Los Angeles*, South Los Angeles Homelessness Prevention and Intervention Collaborative.
- Manjarrez, C. A., S. J. Popkin, et al. (2007). *Poor Health: Adding Insult to Injury for HOPE VI Families*, The Urban Institute.
- Manzo, L. C., R. G. Kleit, et al. (2008). ""Moving Three Times Is Like Having Your House on Fire Once": The Experience of Place and Impending Displacement among Public Housing Residents." Urban Studies **45**(9): 1855-1878.
- Popkin, S. J., B. Katz, et al. (2004). *A Decade of HOPE VI: Research Findings and Policy Challenges*, The Urban Institute.
- Right to the City (2010). *We Call These Projects Home, Solving the Housing Crisis from the Ground Up*, <http://www.wehavenoart.net/public/righttocitycolor4-10-10.pdf>
- State of California Department of Housing and Community Development. "Mission: Strategic Plan and Performance Management System." Retrieved December 11, 2006, from <http://www.hcd.ca.gov/mission.html>.
- Tracy, J. (2008). "Hope VI Mixed-Income Housing Projects Displace Poor People." Race Poverty and the Environment **15**(1).

United States Department of Housing and Urban Development. (HUD Strategic Plan. FY 2006-2011). Retrieved November 29, 2006, from http://www.hud.gov/offices/cfo/reports/hud_strat_plan_2006-2011.pdf.

Social Cohesion

Questions for HIA

- *What are the physical and programmatic assets for social cohesion at public housing? Did those change with redevelopment?*
- *What is the status of social cohesion (social inclusion or exclusion, and residential racial and economic segregation) after redevelopment within residents of the public housing developments? With community external to the developments?*
- *How were residents included/not included in the planning processes for redevelopment?*

Background

Social cohesion is a broad concept that operates at the level of family, neighborhood, identity group, locality, society. Related constructs include social exclusion, social networks, social support, social integration, collective efficacy, and social capital.

Social cohesion includes:

1. Supportive social networks - which provide access to material and emotional support in times of need;
2. Social participation – participation in relationships providing friendship, company, and participation in the workforce; and
3. Community engagement – involvement in the democratic process to advance needs or interests.

Social exclusion refers to if certain members or groups in a society are marginalized, discriminated, or disenfranchised relative to others. Groups can be excluded from resources or opportunities on the basis of ethnicity, religion, gender, or class. This impacts economic position and mobility, educational attainment, and living standards.

Residential segregation is a key spatial indicator of social exclusion. Segregated neighborhoods with a disproportionate share of the poor or ethnic minorities are more likely to have unwanted land uses such as power plants, solid and hazardous waste sites, and bus yards, freeways and other busy roadways. These communities are also less likely to have quality parks, schools, and supermarkets (Acevedo-Garcia and Lochner, 2001). Segregated neighborhoods are often isolated from economic opportunities and marginalized in political decision-making, limiting their ability to effect change in their circumstances. Such place-based social exclusion has profound impacts on health. For example, research tells us that residents of high poverty

neighborhoods have shorter lifespans than non-poverty neighborhoods, in large part due to preventable events like infant mortality, pedestrian injuries, and homicide (ACPHD, 2008).

Social capital is the advantage created through relationships with others (formal, informal, and familial). Another way of thinking about social capital is that it refers to the collective value of all social networks, the inclinations that arise from these networks to do things for each other, and shared values or norms that permit cooperation among members of a group (Putnam, 2000). Social capital is a byproduct of social cohesion.

Evidence on the relationships between social cohesion and health

Relationship of Social Cohesion & Social Exclusion to Health

Social cohesion is closely related to human health and is potentially affected, both positively and negatively, by land use redevelopment (WHO, 2004).

1. Social networks: Ties to others that create security and give meaning to life.

Social networks are a source of material and emotional support for health

- Support can buffer stressful situations, prevents damaging feelings of isolation, and contribute to a sense of self-esteem and value (Cohen, et al., 2000).
- Studies have shown that the lowest rates of suicide occur in societies with high degrees of social integration, and an excess of suicides occur in societies undergoing dislocation and loosening of social bonds (Durkheim, 1997).
- In one of the first US studies about social ties, researchers found that men and women in Alameda County, CA who lacked ties to others were 1.9 – 3.1 times more likely to die than those who had many contacts (Birkman, 1979).
- People with self-reported “severe lack” of social support were over twice as likely to report fair or poor health (Poortinga, 2006).
- Cardiac patients with higher social support recover more quickly after hospitalization for heart disease (Fontana, et al., 1989).
- Social support moderates anxiety and depression of witnessing community violence (Hammack, et al., 2004).
- Level of social support has predicted of successful abstinence from opiate use over time (Gossop et al., 1990), and can bolster maintenance of abstinence in substance abuse control (Bandura, 1997).

Social networks help create and promote healthy social behaviors

- Shared norms can discourage smoking and other drug use, delinquency, violent behavior, and poor eating habits.
- Shaping the flow of resources and information can determine access to opportunities and constraints on behaviors (Berkman and Glass, 2000, Ali and Lindstron, 2006).

- Health behavioral intervention programs recognize the value of using social networks to disseminate health information and design programs around it (Thomas, et al., 2001, Kelly, 2004, Santana-Cruz, 2006).

2. Social Exclusion

Social exclusion means unequal access to health-related resources

Residential segregation demonstrates the health consequences of social exclusion.

- Segregated neighborhoods have differential exposure to environmental hazards (Robert, 1999).
- Segregated neighborhoods have differential access to high quality transportation, education, employment, and other factors impact social mobility of residents, which in turn, impacts their families' socioeconomic status and wealth accumulation.
- Socioeconomic status is one of the most powerful predictors of health, so differential access to factors affecting socioeconomic status can directly affect health outcomes.
- Poor students of color in segregated schools have lower average test scores, fewer students in advanced placement courses, more limited curricula, less qualified teachers, less access to serious academic counseling, fewer connections with colleges and employers, more deteriorated buildings, higher levels of teen pregnancy, and higher dropout rates (Williams and Collins, 2001).

Occupants of socially excluded neighborhoods are often marginalized in political decision-making, limiting their ability to effect change.

- Hyper-segregation of neighborhoods by race and the related underrepresentation of different races or ethnicities tenant's associations can have implications for access to life-enhancing resources for residents.
- The significance of segregation to health is underscored by research demonstrating the differences in life expectancy in US cities vary from neighborhood to neighborhood by as much as twenty years (Geronimus, et al., 2006, Murray, et al., 2006, ACPHD, 2008).

Economic integration:

- Economic integration can lead to less crime and fear of crime, better city services, better opportunities for educational advancement, exposure to different cultures and more role models for children, reduction in obesity and improved mental health (Abt Associates and National Bureau of Economic Research, 2003).
- Economic integration can improve public safety. Reducing residential segregation by income by encouraging mixed-income housing developments has improved household safety, measured by reduced exposure to crime and decreased neighborhood social disorder (Anderson, et al., 2003).

3. Community Engagement - a healthy community is one with a high degree of public participation in and control over the decision affecting one's life, health and well-being (Kawachi, et al., 1997).

Involvement in the political process can impact health

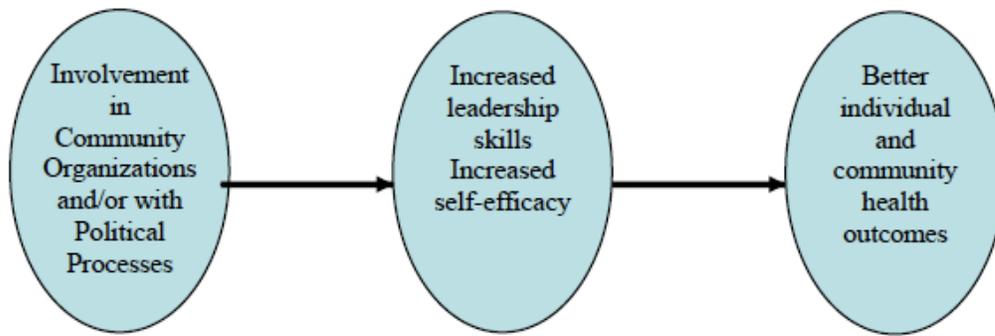
- Examples where involvement in the political process directly impacted health include political organizing to change smoking policies, community-based participatory research to impose limits on the hog industry (caused water pollution from runoff, noxious odors, threatened small farmers' water supply), and increasing access to abortion services (Farquhar and Wing, 2003, Joffe and Yanow, 2005).
- Community-led environmental justice efforts opposed and altered unhealthy land use projects - garbage incinerators, polluting industrial use, and construction of freeways.
- Engaging community members in advance of land use projects can help planners identify public infrastructure concerns and needs.
- By *collective problem-solving* to achieve material, political, and spiritual needs, neighbors can take action together and help solve local health dilemmas.

Group membership and political participation are associated with human health outcomes.

- For one standard deviation increase in group membership in a community, mortality decreased by 83.2 individuals per 100,000 (Kreuter and Lezin, 2002).
- People involved in electoral participation were 22% less likely to report poor/fair health (Kim and Kawachi, 2006), and in a study about neighborhood environment, if political engagement was low, people had 52% higher odds of reporting poor health (Cummins, et al., 2005).

Autonomy and control are essential to health.

- Research has connected low levels of control in jobs with unfavorable health outcomes, such as heart disease and stress (Syme, 1998, North, et al., 1996).
- People with low "self-efficacy", or perceived ability to succeed at a task, may forego preventative practices, such as monitoring diabetes. Increasing self-efficacy is a key to encouraging behavior change (Bandura, 1997), and political participation – in particular winning on issues – can increase people's belief that they can get things done.
- Community and political engagement can develop leaders and increase self-efficacy (Gilhuly, 2008).



Public participation in planning can promote social cohesion and healthier planning decisions
 Meaningful and inclusive public participation in land use planning can build consensus on shared development objectives (e.g., affordable housing, parks) making contributions to health, well being, equity and social cohesion. Land use planning projects that do not meaningfully and successfully engage the affected community can polarize interests and open themselves up to criticism and opposition.

Examples of conceptual direct and indirect health consequences of participation

Non-participation health risks	Participation Health Benefits	Participation for Health Needs Social Benefits
Alienation Apathy Passivity Stress Depression	Optimism/hope/ positive outlook Self-esteem Sense of control Sense of belonging Social Support Inclusion Self-efficacy	Collective efficacy Social capital Safety/security Housing adequacy Secure livelihoods Access to health care Environmental quality

Land use development can affect both social cohesion as well as social inclusion

- Development can benefit social cohesion by providing settings such as plazas, downtowns, and cultural facilities that enable social interaction.
- Development can prevent social exclusion by ensuring mixed-income neighborhoods, ensuring more equitable access to employment opportunities, retail and financial services, schools, libraries, and public transportation.
- Land use policy has harmed social cohesion via involuntary displacement or actions that indirectly lead to neighborhood disinvestment.
- Gated or otherwise exclusive development prevents social interaction among diverse groups

Standards

There are no public agency “standards’ for the achievement of social cohesion in the context of land use planning. There are, however, principles and guidance for public participation in the context of land use development and federally funded public housing. These principles can help prevent social exclusion, residential segregation, and promote social inclusion and development of social capital.

Federal Guidance

The National Environmental Policy Act (NEPA) publishes guidelines on environmental justice in land use projects (Council on Environmental Quality, 1997). In preparing an Environmental Impact Statement or Assessment, agencies must consider both impacts on natural or physical environment and related cultural, social, and economic impacts. NEPA sets out six principles for guidance:

1. Determine if minority or low-income populations will be affected by any adverse health or environmental impacts in project area.
2. Consider public health or industry data regarding cumulative exposure to health or environmental hazards, historical patterns of exposure to environmental hazards.
3. Consider cultural, social, occupational, historical, and economic impacts of changes in the physical environment, including disruption of physical or social structure of a community.
4. Develop effective public participation strategies to overcome linguistic, cultural, institutional, geographic, or other barriers to meaningful participation and incorporate active outreach to affected groups.
5. Be aware of diverse constituencies when seeking community representations and endeavor to have complete representation of the community as a whole.
6. Seek tribal representation that is consistent with established government-to-government policies when Native American groups are involved.

US. Dept. of Housing and Urban Development Strategic Plan Goals (HUD, 2006)

- C. Strengthen Communities (through offering economic opportunities, healthful living conditions, and an end to homelessness)
- D. Ensure equal opportunity in housing
 - D1. Ensure access to a fair and effective administrative process to investigate and resolve complaints of discrimination.
 - D2. Improve public awareness of rights and responsibilities under fair housing laws.
- E. Embrace high standards of ethics, management, and accountability.
- F. Promote participation of faith-based and community organizations.

Department of Housing and Urban Development 24 Sec. 964.11: Tenant Participation (HUD, 2003)

- HUD promotes resident participation and active involvement of residents in all aspects of a Housing Authority's overall mission and operation.
- Residents have a right to organize and elect a resident council to represent their interests. As long as proper procedures are followed, the Housing Authority shall recognize the duly elected resident council to participate fully through a working relationship with the Housing Authority. HUD encourages HAs and residents to work together to determine the most appropriate ways to foster constructive relationships, particularly through duly-elected resident councils.

Fair Housing Act (HUD, 2009)

- Makes it unlawful to discriminate in housing against person based on race, color, religion, sex, national origin, disability, or familial status.

California State Guidance

2003 State of California guidelines for General Plans (Grattidge and Lawler, 2003) state that community engagement in land use planning can:

- Provide valuable information to better inform policy and project development decision-makers.
- Insure the plan's successful implementation by building a base of long-term support with the public.
- Reduce likelihood of conflict and drawn-out battles by addressing public concerns during the planning process rather than on a case-by-case basis in the future.
- Educate the public about community issues.
- Increase the public's ability and desire to participate in the community.
- Enhance trust in government by strengthening the relationship between elected officials, government staff, and the public.
- Work toward community consensus and create a vision for the future.
- Lay the groundwork for community revitalization and increase investment in the community.
- Obtain public input regarding plan policies, community issues, and objectives.
- Provide the public with opportunities to evaluate alternative plans and participate in developing and choosing a plan that works for their community.
- Make sure the project is embraced by and is useful to the community.

Local Guidance - SF Housing Authority

HOPE SF has recommended guidelines for new housing that include participation of residents in planning (Task Force, 2007):

4. Involve residents in the highest levels of participation in the entire project:
 - Resident engagement in planning and implementation
 - Develop mechanisms for residents to engage in the process
 - Resident-driven occupancy criteria

8. Build strong sense of community

- Solicit input from entire community in planning and development process
- Include current and prospective residents
- Reach out to and engage neighbors

SF HOPE Task Force Recommendations Next Steps first include expanding the outreach and education process with public housing residents and other stakeholders. As stated: One of the core principles of the HOPE SF Task Force is the early and authentic involvement of residents in every step of the process, as well as public education and engagement with other community stakeholders.

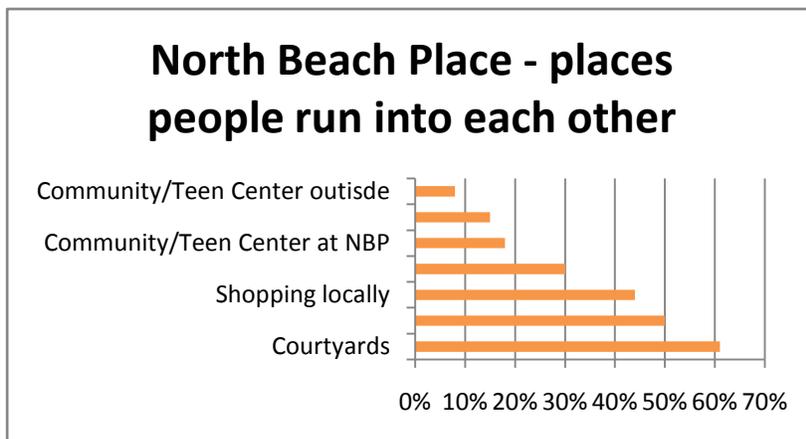
Existing Conditions and Assessment of Redevelopment Impact on Social Cohesion and Participation in Planning

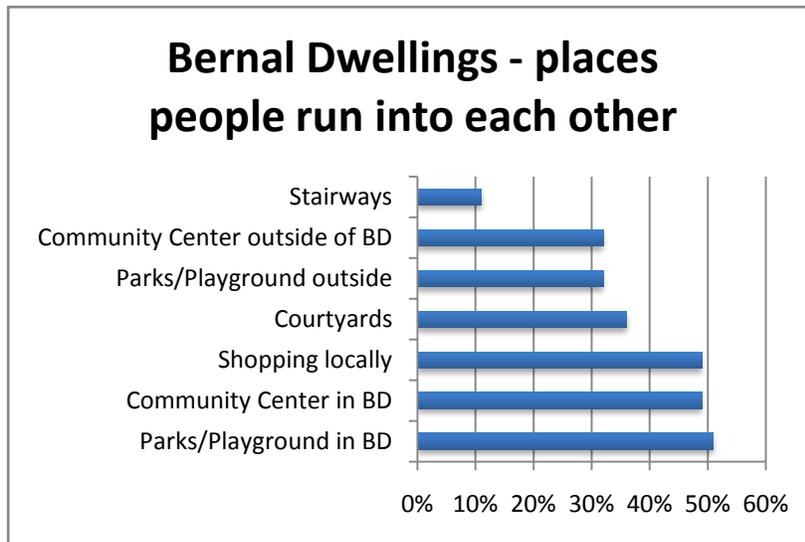
We summarize our review of the literature, and the results of key informant interviews and the Health and Redevelopment survey below. Question we sought to answer in our assessment include:

- *What are the physical and programmatic assets for social cohesion at public housing? Did those change with redevelopment?*
- *What is the status of social cohesion (social inclusion or exclusion, race relations) internal within residents of the public housing developments? With community external to the developments? How did redevelopment effect social cohesion?*
- *How were residents included/not included in the planning processes for redevelopment?*

Physical and Social Assets for Social Cohesion

Our survey asked where in their housing complexes people tend to run into each other. Answers at each location were slightly different.





People were asked if they would use the common spaces for different kinds of activities. Specified activities were: Hanging out/ Chatting with friends; family gatherings; play areas for children; rest/relaxation; exercise/ play sports or other games.

People generally felt that common spaces are better than before redevelopment, however:

- They were mostly *neutral* on whether they would use them for the above activities;
- The second most common answer to using common space for activities was *very unlikely*;
- The exception was that both sites were *slightly more likely* than before redevelopment to use common spaces to rest/relax

At Bernal Dwellings, residents were:

- *Slightly more likely* to use common spaces for hanging out; and
- *Pretty likely* to use common spaces for chatting with friends.
- In terms of using spaces for exercise, they were equally *neutral* and *very unlikely*.

Many key informants felt that the Community Center run by the Mission Neighborhood Centers is a boon for social interaction as well as for safety, programming, resources, advocacy for both adults and youth. One person stated, “I come here to the Community Center to talk...to vent when stressed...to hear different perspectives.” People felt mixed about parks available in the area; clearly they use them (see below) but are nervous about gang activity, the need to supervise children, and lack of age-appropriate recreation for older children and adults. One person responded, “People socialize in the middle of the street, there’s not really a place for socializing.”

Additionally, many people mentioned that police harass youth and adults at Bernal Dwellings, targeting them for investigation with no evidence, profiling them due to their race, taunting

them with insults and threats (see **Crime and Safety** Chapter for more detail). As a result, residents are reluctant to use common outdoor space to interact with each other.

At North Beach Place, residents were:

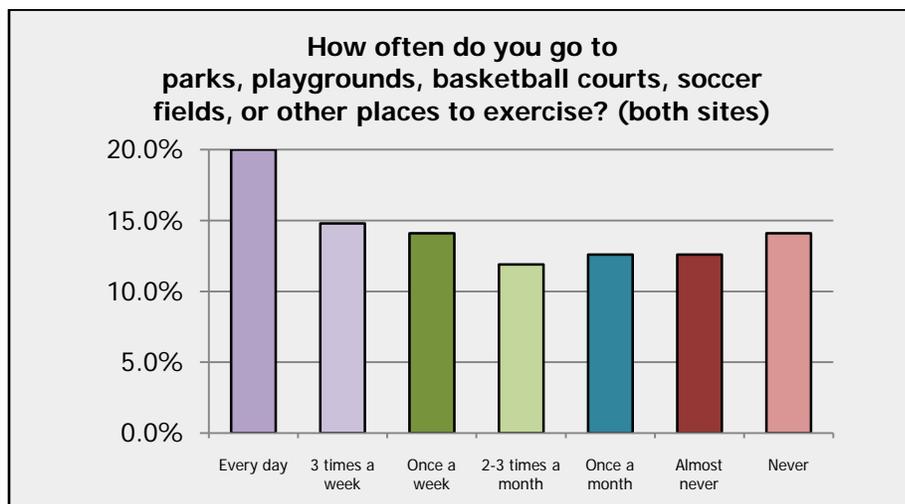
- *Neutral* about using common spaces for all activities except playing sports;
- They were *very unlikely* to use common spaces for playing sports.
- The second most common answer - they were *very unlikely* to use common space for most activities;
- Except that they were *pretty likely* to use some to rest/relax.

Key informants talked about some ways and places they have interacted with others:

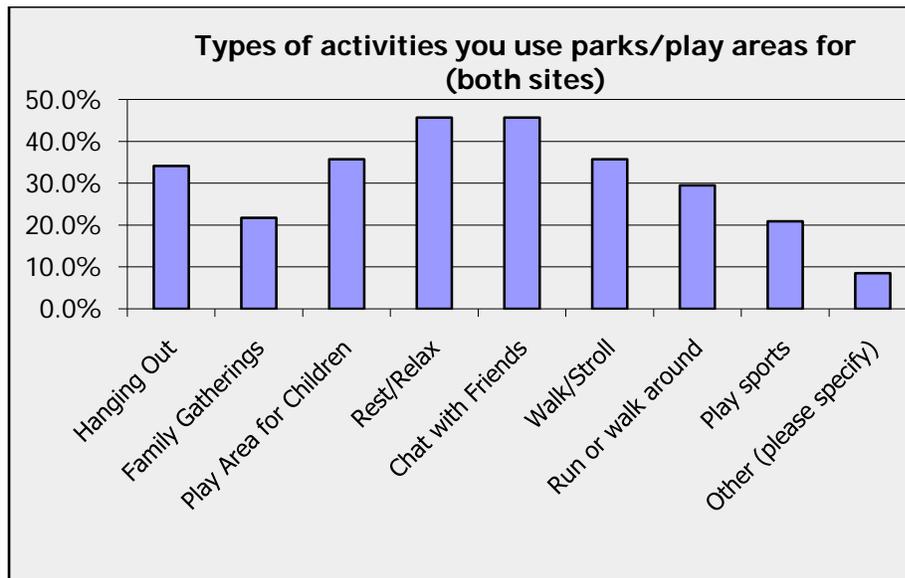
- *“If you want to do community garden work and send out a newsletter, people will come.”*
- *“There are a number of ways I interact. I volunteer at the food pantry, participate in a number of services, I’m taking a new English class.”*
- *“I meet new people; they have a lot of community things at the teen center.”*

One of the biggest obstacles, however, to using community spaces for social interaction, is stringency of rules at North Beach. Rules like not allowing children to play on anything with wheels to not allowing barbecuing deters residents from using common spaces, and thus inhibits social cohesion. In both sites there was some mention that rules and fear of eviction at times led people to mistrust others.

Parks. People who use the parks do so quite regularly, offering a potential way that residents can casually connect with one another. 72% at Bernal Dwellings and 57% at North Beach Place of those answering the survey say they use the parks 2-3 times a month or more.



The types of activities residents use parks for is highly conducive to social interaction:



Community Centers. Physical assets are not the only resources residents have for interaction. Especially at Bernal but to a smaller extent at North Beach, people use the Community Centers and the programming available to residents – youth, adults, and seniors. However, in community meetings where HIA results were presented, residents were clear in North Beach Place that lack of access to use of community centers was an obstacle in creating social cohesion. In both sites, the need for increased variety of programming to serve more residents would aid in bringing people together, especially people of different races and ethnicities, and also to bring youth and adults together.

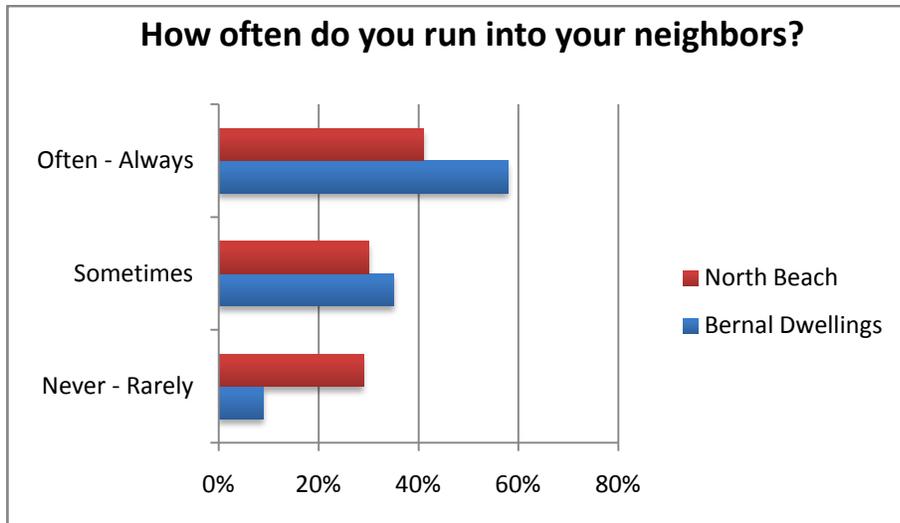
Sixty-nine of 130 (slightly more than half) answered that they had used a program at their Center. In Bernal Dwellings, 67% of those surveyed have used the Community Center, and at North Beach Place, 46% responded that they have used the Community/Teen Center. Residents use the center for many things (see **Youth Programs and Services** chapter), but many stated that they make new friends there (42% at Bernal, and 65% at North Beach).

Assets and Obstacles for Social Cohesion (BD=Bernal Dwellings, NBP=North Beach Place)

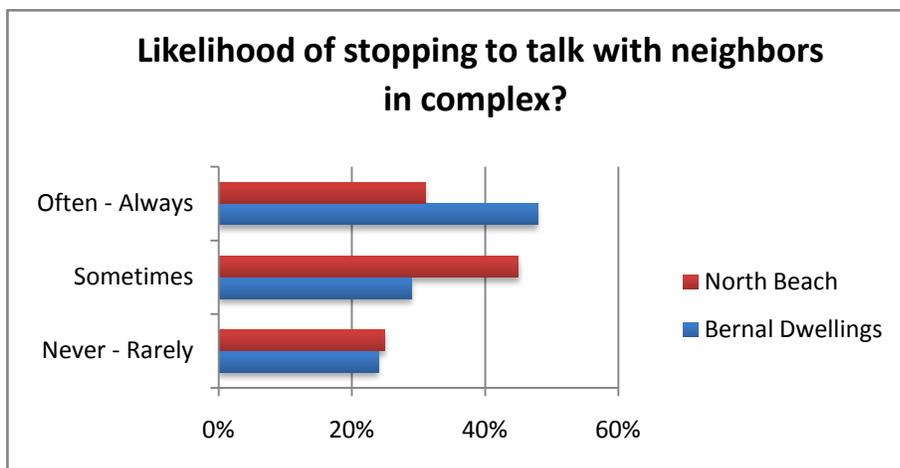
Physical and social assets for social cohesion	Obstacles to social cohesion	Recommendation
Public meeting spaces	Need to get permission to use space; bathrooms locked (NBP).	Publicize resident access to common space for events; resident council review rules at NBP to make community space more accessible.
Community Center/ Teen Center	Not enough outreach, not enough parental involvement, not enough programming (NBP), hours of operation aren't long enough (both)	Fund more staff for longer hours of operation; fund more extensive outreach including parental involvement; find creative ways for residents to offer programming to each other
Common outdoor areas	Stringent rules (NBP): no gathering, no barbecuing on porches or in common space, no use of wheeled toys in common space. Thus, adults and children do not use common space for play & exercise	Involve residents in review of rules
City parks nearby with recreational facilities and programming	Some feel: Parks not designed for teens; Not enough diversity of programming; Not safe enough (BD)	Engage city in park redesign; Police follow through on enforcing existing laws on loitering
	Concern over police harassment (BD) (see Crime and Safety chapter)	City should engage police department in issues of harassment of local youth

*Social cohesion **within** the housing developments*

Residents were surveyed on how often they run into their neighbors while in the housing complex. People at Bernal Dwellings run into their neighbors more often than those at North Beach Place.



People also responded as to how likely they are to stop and talk with neighbors within the complex. More people at Bernal said *often to always*; at North Beach, more said *sometimes*.



When asked if opportunities to meet up with neighbors are better or worse compared to before redevelopment, 65% of people at both sites who felt they knew (because they had lived or experienced the complex before redevelopment) felt that opportunities were better.

In Bernal Dwellings, the connection between residents is clear from the number of people who used to live there who return to visit friends and participate in activities at the Center. However, there were many comments demonstrating that social connection used to be stronger before redevelopment due to displacement from eviction, choosing to live elsewhere, or those who newly live at Bernal but do not yet feel connected and miss their old friends and neighborhoods. One woman stated, *“Back when I was growing up here, this community provided support more than now. We were more of a family.”*

In North Beach Place, people feel it is much safer and have more trust of neighbors. However, resident interaction generally seems somewhat superficial, and there is disgruntlement about people who do not obey the rules. Many people commented that they say hello to people and recognize faces, but do not interact beyond that. One person went so far as to say, *“Before redevelopment, people got along – there was some violence, but they stuck together. Now, everyone thinks they’re better than other people.”* Another person commented that, *“At the place I lived before, everyone was very connected. If I was late at work my kids could go to other people’s apartments, we all knew we would take care of each other. There was more of a sense of community there, but not as many amenities as here.”*

Displacement has been an obstacle to social cohesion in the two sites in San Francisco as well as nationally. Housing policy critics argue that poor families and neighborhoods have borne the brunt of a general decline in social capital in part because government programs designed to improve housing conditions for the poor have effectively destroyed social bonds among families and neighbors as well as their connection to the mainstream economy and its social institutions (Saegert and Winkel, 1997). (See **Displacement** chapter for more information). Current residents supplied evidence that redevelopment has, for many, interrupted social networks and made connecting with friends and family slightly more difficult to different extents.

Only 35% of those surveyed in Bernal Dwellings and North Beach Place had lived in their housing complex before and after redevelopment. In Bernal, 56% had lived there before and after redevelopment, and in North Beach, only 24% had. In national tracking studies of public housing residents from HOPE VI redevelopment sites, only 14% - 19% had returned to newly remodeled HOPE VI sites (Burton, et al., 2002).

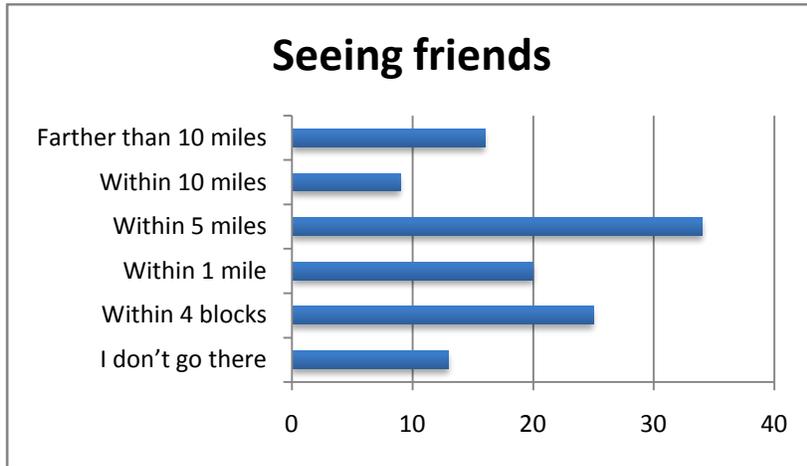
Relocates who moved to other public housing, used vouchers, or lived elsewhere entirely, typically moved on average about 3 miles from their original housing site (Comey, 2007). While 3 miles is not that far, if they do not have a car, it can be an obstacle. In public housing developments in Atlanta, Georgia, only 27% of family residents owned a car, and 10% of senior citizen residents (Oakley, et al., 2009). It is likely that the SF sample is similar, given that 59% take MUNI daily, 65% walk daily, and only 22% drive daily.

People at the two San Francisco HOPE VI redevelopment sites said:

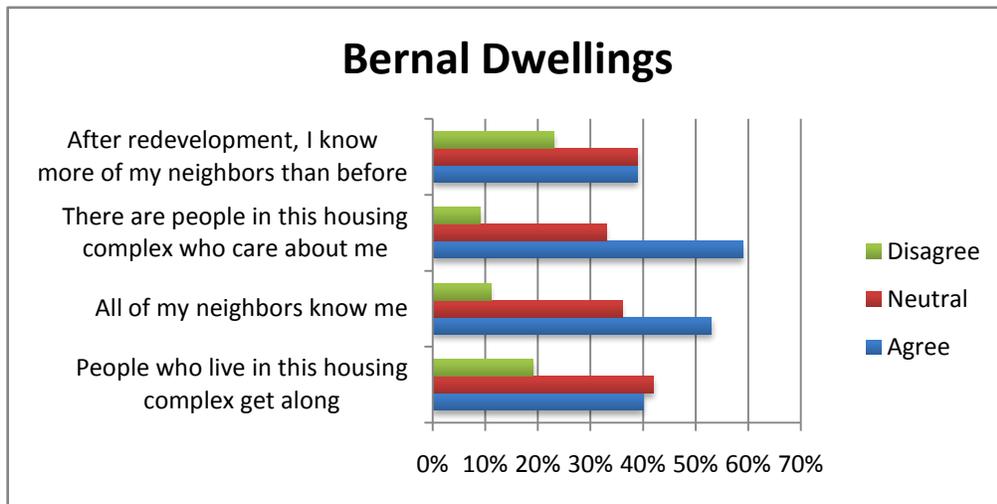
- *“When I moved, all my social connections went away because everyone had new phone numbers, new locations, new everything. It was hard to stay in contact with people.”*
- *“There used to be a strong social network [before redevelopment], but when we moved, it got disrupted. Then when we came back, people didn’t know who we were or remember us.”*

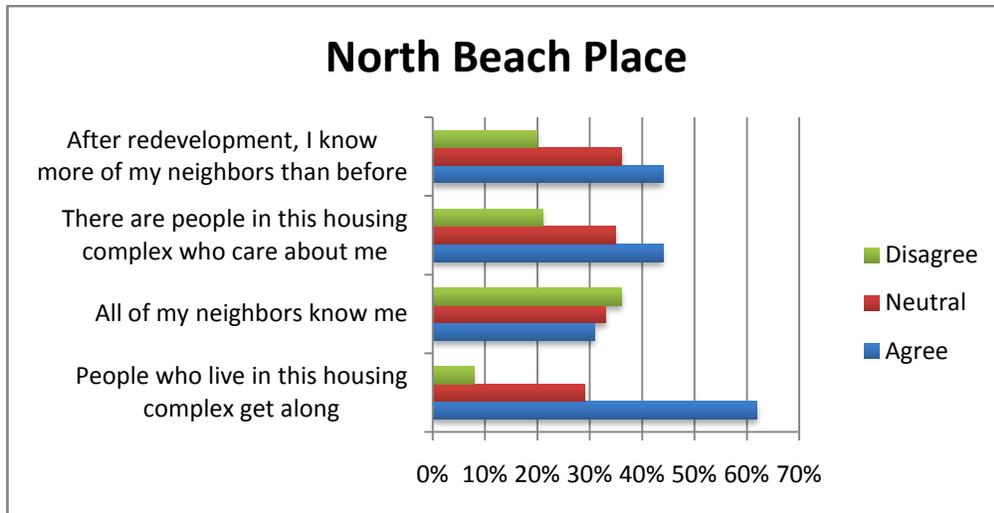
Most people (69%) are not in touch with people who lived at their complex before redevelopment. In North Beach, the effect of displacement on relationships is more dramatic – 78% stated they are not in touch with people who had lived at North Beach Place before redevelopment. In Bernal, 55% are not in touch with people from before redevelopment.

However, residents appeared to be willing to travel varying distances to see their friends. Most people had friends within 5 miles.



Survey results below express how much people at the two San Francisco locations feel connected to other residents.





In terms of social support, people living at Bernal Dwellings felt more strongly that they have a network of relationships that they can depend on for help. When asked if they have friends in this housing complex that they can depend on:

<u>Both sites</u>	42% agree, 32% remained neutral, 26% disagree.
Bernal	57% agree, 26% remained neutral, 17% disagree,
North Beach	36% agree, 37% remained neutral, 28% disagree.

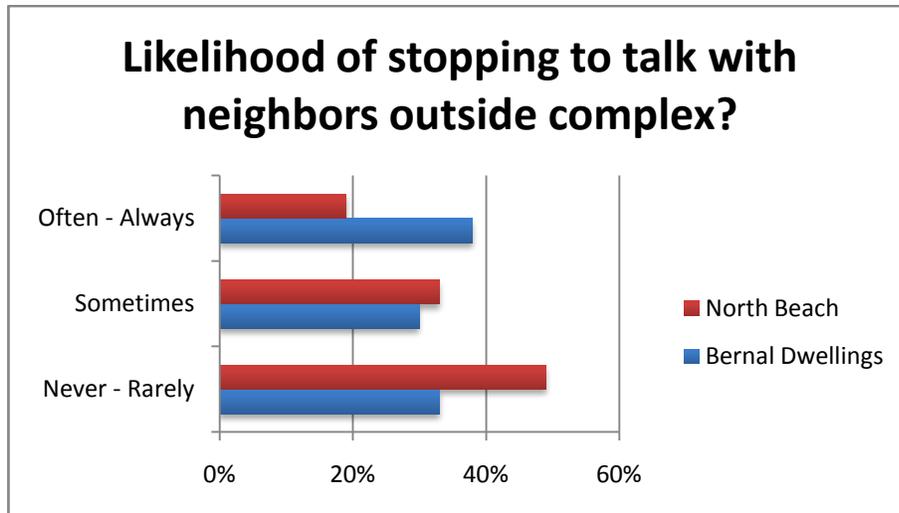
A separate question asked if people look out for each other in their housing complex:

<u>Overall</u>	48% agree, 34% remained neutral, 19% disagreed.
Bernal	41% agree; 48% remained neutral, 11% disagreed.
North Beach	53% agree, 25% remained neutral, 22% disagreed.

These responses suggest a comparable or higher degree of social support than found in San Francisco as a whole (SF residents report only 34% of the time that someone is always available to understand problems, 29% report only 29% of the time that someone is available to help with daily chores when sick, and 49% report that someone is always available who loves you and makes you feel wanted) (HDMT 2010, CHIS, 2003).

Social cohesion with community members outside housing developments

We asked residents how likely they are to talk with people outside of their complex. Bernal Dwellings residents were almost *equally likely* to talk as not talk with community neighbors, but at North Beach Place, more people said that they *rarely or never* do.



People at North Beach stated overwhelmingly that *opportunities to talk with people outside the development are better* compared to before redevelopment. At Bernal Dwellings, people only marginally felt they were better. Overall, 60% of people who felt they knew (because they had lived or experienced the complex before redevelopment) felt that chances to meet people within the complex are better than before redevelopment. (33% the same, 2% worse)

Bernal Dwellings: 51% better

North Beach Place: 68% better

When asked if *people who live in the housing complex get along with people outside the housing complex*, a little over half (52%) of the people in both sites agreed that people get along with people outside of the housing complex, 38% were neutral and 8% disagreed. Again we see differences at the sites:

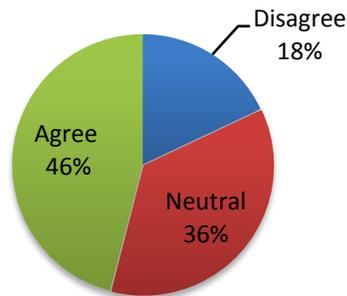
Bernal Dwellings: 46% agreed that they get along with people outside the complex. 18% disagreed.

North Beach Place: 58% agreed that they get along with people outside the complex. 5% disagreed.

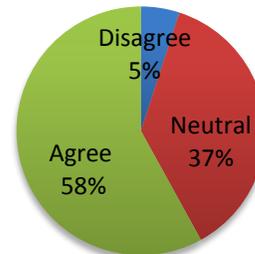
Regarding integration of the housing complex into the surrounding community, residents of North Beach Place had stronger feelings of being integrated than those of Bernal Dwellings. At Bernal, 40% remained neutral in answering this question, 16% disagreed and 44% agreed. At North Beach, two out of three people (66%) agreed that the housing complex is better integrated into the community since redevelopment. Only 10% disagreed and 24% remained neutral.

Race ethnicity, location, and transportation may explain some of the higher percentages for interacting with others. The demographics of North Beach, in particular have dramatically shifted to Asian populations. Some of the key informant interviews conducted in Chinese revealed that they were happy to live in North Beach because of its proximity and bus line to Chinatown, where they could easily interact with family and friends.

Bernal Dwellings is better integrated into surround community



North Beach Place is better integrated into surrounding community



Key informants at Bernal Dwellings mostly felt as though they were not integrated well with the community, and gave some statements highlighting that:

- *“It’s worse because young kids fight with the Mexicans.”*
- *“The surrounding owning class treats us like something not good - as ‘the projects’.”*
- *“The surrounding community has shut us off, like we’re a plague....a disease. They are outside; we’re inside.”*

Key informants at North Beach Place felt more positively about being integrated with the community outside of complex, although there were some mixed comments:

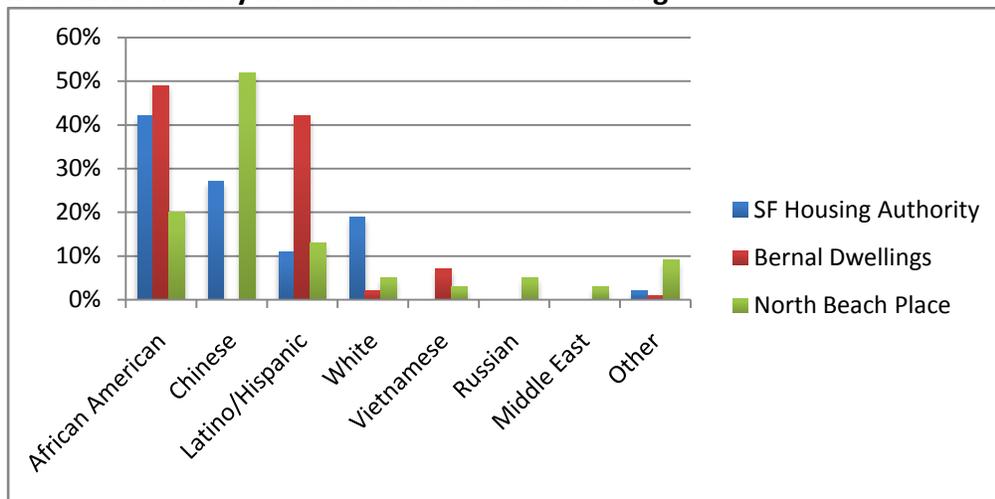
- *“We have the support of the North Beach community. Even low-income residents have support. It’s more integrated here. At the other site where I lived, we [the people who lived in public housing] were considered dangerous – the surrounding community did not want to be involved with us.”*
- *“I feel like in the neighborhood, there’s not as much stigma associated with living here because it’s so nice. I know some people in the neighborhood – I babysit for someone, I know shopkeepers, and I work in North Beach.”*
- *“No, we don’t really interact with people in the surrounding community. Unless it’s to look at us and say, ‘there’s the project people!’.”*

Race and segregation in SF Housing

The US Census calculates a diversity index, which is a measurement from 0 – 100 indicating the diversity for a geographic area (US Census Bureau, 2009). “0” means that everyone is of one race or ethnicity; 100 means that races are equally distributed. Referencing the **Neighborhood**

Conditions chapter, we see that in 1999 the Bernal Dwellings ¼ mile diversity index is quite high: 81. In North Beach Place, the diversity index is lower at 55. Below are descriptive data for race and ethnicity according to the San Francisco Housing Authority and the HIA surveys.

Race and ethnicity in San Francisco Public Housing*



Sources: *San Francisco Housing Authority; UC Berkeley SF Housing survey.*

*SF HA consolidates all Asian ethnicities into one Asian/Pacific Islander category, here depicted in the “Chinese” category.

A well-known evaluator of HOPE VI redevelopments, Susan Popkin, stated that before redevelopment nationally, there were “extreme levels of racial and economic segregation in distressed public housing. For many reasons, including lack of political clout, deliberate neglect, and prejudice, these developments were often allowed to deteriorate, and residents suffered high levels of physical and social distress. The net effect was that HOPE VI revitalization efforts almost exclusively affected minority residents and communities. This fact is rarely cited in policy debates over HOPE VI, but the reality is that the issue of race must be a central element in any discussion of the program’s impact on residents and communities. (Popkin, et al., 2004)”

In a national evaluation brief of HOPE VI, five sites in the US were followed at baseline, in 2003, and 2005. Four of the five sites had minority concentrations of an average of 92% of one minority in an area (in this case, a high percentage means NOT diverse). As of 2005, people who relocated from the HOPE VI distressed housing sites only marginally improved the diversity of their neighborhoods, to an average of 87% minority concentration (Buron, 2004).

Residential segregation

After redevelopment key informants report more diversity at both sites. Several people expressed that they felt that management at both sites were trying to exclude African Americans from living at the public housing complexes. Quotes below from the interviews shed further light on both of these observations.

Comments about race and ethnicity at Bernal Dwellings:

- *“There are a variety of people here now.”*
- *“The pre-school next door was supposed to be for kids from the housing, but they send us up the street. My son got in here, but they were prejudiced, he was the only black. They all speak Spanish, and my son didn't understand.”*
- *“They are evicting a lot of people. People say that they are trying to get the black residents out. A lot of the new are Chinese or Spanish. It used to be all black.”*

Comments about race and ethnicity at North Beach Place:

- *“It's more multi-cultural now but there is no integration. There are more Chinese people here – I wish that they would just say hi or bye when they saw us.”*
- *“I don't think I would have gotten in here if not for an African American woman who worked in the management office.”*
- *“One negative thing is that the management is very, very watchful of African American males. If any are standing, congregating, even if they are not doing anything, they don't like it. African American families get evicted because they get a note that says their child was seen on cameras outside congregating. They weren't doing anything wrong, just standing and talking.”*
- *“There are not many African American or Latino families here – mostly Asian, Russian, some Middle Eastern, some Arabic. I guess people don't interact that much.”*
- *“I haven't experienced any race issues. People pretty much keep to themselves, on my side. There are a lot of different races here, different types of Asian people, Latino, African American, Russian, Arabic.”*
- *“There is some racial tension that I worry about.”*
- *“No, there's not really racial tension. I don't think there's discrimination that I know of. There is a higher Asian population than African American. It used to be more African American before redevelopment. Now it's only about 10% African American, it used to be over half.”*

Overall, 61% of people surveyed at both sites agree that people who speak different languages get along. The sites vary to some degree. In Bernal more people were neutral and disagreed. 48% agreed, 41% responded neutral on this question, and 14% disagreed. At North Beach Place residents agreed more strongly. 64% agree, 26% were neutral, and 10% disagreed.

Economic segregation

In San Francisco, the average household income in 2000, according to the Census, was \$58,741. Within a ¼ mile of Bernal Dwellings, the income level is about the same: \$58,730. In North Beach Place, however, household income is higher - \$63,010. According to residents responding to the HIA survey 44% made less than \$10,000 annually. At Bernal, 50% of those responding make under \$10,000, and at North Beach, 39% do.

While residents who brought up the topic of mixed income housing seemed to understand and support the idea, they also expressed some concern that those who are truly needy might get left behind. As one woman stated, *“I get the idea of what they were trying to accomplish – mixing different incomes and family types is a good idea. But I would say don’t forget the mission of public housing. Don’t exclude low-income folks because of your new concepts.”*

Political and community engagement

In both complexes, two out of every five people (41%) people reported being involved in their community. This is quite high. Statewide, 26% of Californians reporting volunteering in 2007.

Some of the examples of how SF Housing residents at Bernal and North Beach Place are engaged in volunteering gave include:

- Attend tenant meetings
- Help clean up the center
- Volunteer at community events
- Help plan events for kids
- Volunteer at center
- Worked in Center office
- Volunteering and association meetings
- Coordinate senior support group of N.B.P
- Work at the summer food lunch program
- Help set up a tenant's association
- Food bank
- Interpretation

There is a slight relationship between income and involvement in the housing complex, with the greatest amount of participation in the highest income bracket.

Self-reported Involvement in housing complex (e.g., volunteering, tenant meetings)			
Incomes		Bernal Dwellings	North Beach Place
<\$5,000		4/11 (36%)	5/20 (25%)
\$5,001 - \$10,000		2/11 (18%)	5/11 (45%)
\$10,001-15,000		3/5 (60%)	4/12 (33%)
15,000+		7/10 (70%)	13/25 (52%)

Participation in tenants association can be another opportunity for neighbors to interact to solve problems collectively. There are many factors that affect participation in tenant associations in public housing. One study specifically looked at attachments to others in the complex, grievances, resources, and feeling of efficacy. In sum, they found that (Conway and Hachen, 2005):

- People with social ties to those in their complex are about 140% more likely to attend a tenant association meeting than those with no ties
- People who have lived in complex longer are more likely to participate. An additional year of residency increased the odds of participating by 5%, and those who had been there 10 years were about 62% more likely to attend a tenant meeting than someone who had just arrived.
- Having grievances had no particular effect on participation.
- Variation in having resources (time, money) were less important in terms of involvement, however, education level did matter. Those who had graduated from high school were over 80% more likely to participate than those not graduating from high school.
- Those who were efficacious (measured as people who were registered to vote) were more likely to participate.

At the SF Housing sites, *less than half, or 49% of residents agreed that they are an important part of their housing complex* and 16% disagreed. By site, though, less people were neutral on this question at North Beach Place. At Bernal, more people felt neutral than agreed with this statement.

Bernal Dwellings:	Agree: 38%	Neutral: 47%	Disagree: 15%
North Beach Place:	Agree: 55%	Neutral: 29%	Disagree: 17%

Regarding the Tenant Association, the survey answers reveal that most residents remained safely neutral in revealing whether or not they felt the Tenant Association represents their interests. North Beach Place residents were less apt to check “neutral”, however.

Tenant Association represents my needs:

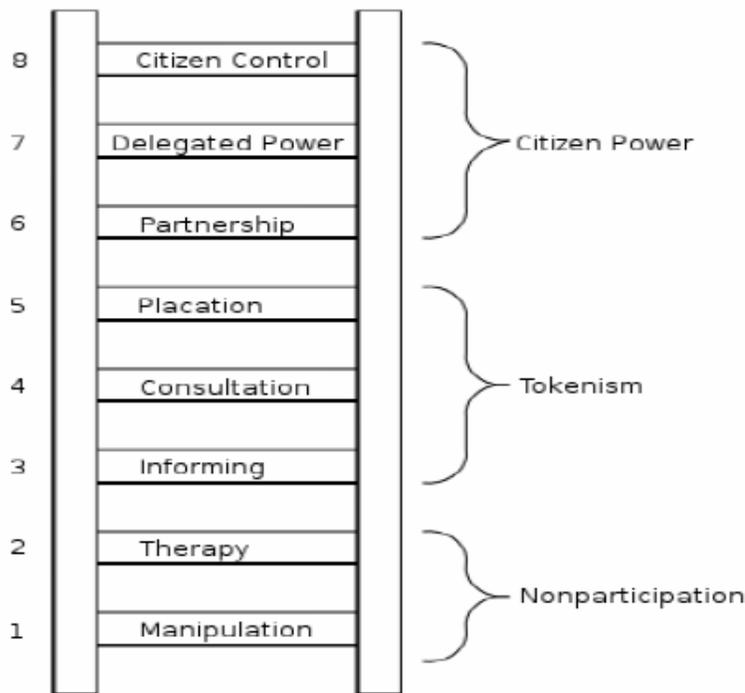
Bernal Dwellings:	Agree 22%	Neutral 64%	Disagree 14%
North Beach Place:	Agree 38%	Neutral 36%	Disagree 26%

Residents have a say in how housing complex is managed:

Bernal Dwellings:	Agree 20%	Neutral: 48%	Disagree 32%
North Beach Place:	Agree 44%	Neutral: 33%	Disagree 23%

Participation in municipal planning processes can mean attendance at a meeting, involvement in identifying problems to be solved, or a partnership to take action, or other interpretations. The “Ladder of Citizen Participation” below illustrates different types of engagement people may experience in planning (Arnstein, 1969).

Lower rungs of the ladder include services or information being provided “to” people as opposed to seeking expertise and experience of residents. Middle rungs show where opinions are sought but rarely incorporated. Higher rungs include partnerships, where participants advise decision makers but do not hold the power themselves. Only at the top rungs do participants meaningfully influence decisions.



Resident involvement in public housing governance and management can have some beneficial outcomes, as demonstrated in evaluations of full and partial resident management experiments (Koebel and Cavell, 1995).

- Improve living conditions for residents in public housing
- More cooperative with the housing authority
- Safer, cleaner, and better maintained environment
- Empowerment of residents, increased sense of community & proprietorship
- Better relationships with outside community, positive role models for youth
- Can lead to decrease in operating and administrative costs for housing authorities
- Successful Resident Management Corporations have improved property management by lowering vacancy rates, increasing rent collection, improving maintenance, improving security.
- Atmosphere of tenant control increases pride in condition of property.
- By training residents to make ordinary repairs, costs are reduced.
- With tenant participation in management, residents are often more willing to accept policies rewarding helpful behavior and punishing destructive behavior.

There are also problems to watch out for.

- Choosing the leaders are important – not all people are good leaders/managers because they are charismatic and can win votes in a resident election.
- Ineffective follow through on training.
- Insufficient support and cooperation from the public housing authority.
- Lack of performance goals.

- Poor record keeping.
- Incomplete contract work plans.

Most key informants at the SF Housing sites were not much involved in the planning processes, and in the survey, less than one in three people (31%) felt that residents have a say in how the housing complex was redeveloped.

In North Beach Place, the community participation seemed to reach the middle rung level – opinions are sought but not always incorporated. Five people in North Beach were engaged in the redevelopment planning process and the consultants actively solicited their involvement, but five people representing almost 300 people does not make a partnership. Interestingly, not one of the residents on the HOPE VI redevelopment planning Steering Committee chose to live at North Beach after the redevelopment. One resident even stated: *“I went to a couple of tenant’s association meetings. The problem is in many of the public housing projects, the tenant’s associations, even though they have tenants on them, they’re controlled by management, so sometimes the tenants may get rewarded for going along with what management says. You have to have tenant’s associations that are unaffiliated with management, so they feel comfortable saying what they want. I would say, though, in my experience the tenants on our tenant’s association seemed sincerely interested in hearing what people had to say. Where it goes after that I don’t know.”*

In Bernal Dwellings, none of the key informants had taken part in the meetings, and most knew of no one who had involvement in the planning process. In the survey, more people disagreed than agreed with the statement, *“Residents have a say in how housing complex was redeveloped”*: **30% agree**, 39% neutral, 32% disagree.

Participation in Bernal Dwellings:

- *“If they were into what the community wanted, they would listen to the tenants. They [SFHA] asked us what we wanted—we wanted the complex to be gated off, with a community center in the middle. We had meetings. We filled out surveys. They made us feel like our input meant something. This is not how we wanted it. So now everyone was like ‘I don’t like this. I want to go.’ They promised us opportunities to use Section 8 vouchers on Rent-to-Buy units.”*
- *“They should have kept the original plan. They had input from the residents and potential residents. Make it comfortable for residents. Should have kept the original plan...people would enjoy it vs. complaining.”*
- *“We asked for a gated community, with a play area for the kids, and garages. And we got none of it. They didn’t tell us we are going to pay for water.”*

Participation in North Beach Place

- *“I wish they would have redeveloped in two phases like they promised. We went to tenant meetings and made our wishes known, and they went back on their promises. If they had done that, I wouldn’t have had to move and be relocated.”*

- “There’s some planned activities for the tenants – I used to see flyers around for tenant meetings and such. I haven’t seen as many of those flyers lately.”
- Also the above comment about management organizing the Tenant’s Associations came from North Beach Place.

Conclusions and Recommendations

With respect to physical and social assets for social interaction, both sites have built in many potential physical assets for social interaction, and some of those are being used to some extent. The ones that are most successfully used have some sort of programming built in (such as the Community/Teen Centers, although even there it is clear that added staffing would be useful). Engaging residents in solutions for making existing assets more usable would increase opportunities for social cohesion and interaction.

In terms of social cohesion, displacement from redevelopment has affected social networks that existed; only 35% of people surveyed had lived there before and after redevelopment, and 7 of 10 are not in touch with people who had lived there before redevelopment. Both sites report weakening of social ties within the housing complex, but at Bernal Dwellings people seem to have kept up relationships more than at North Beach Place. While people report polite and appreciative relationships with neighbors at North Beach, closer ties were not commonly mentioned, unlike at Bernal. At Bernal, the Community Center has taken on many roles that provide social cohesion, such as advocating for people in need, propagating healthy social norms such as staying out of trouble, and providing a place for people to connect.

Because social ties and social support encourage good health through establishing healthy norms, providing material and emotional support during hard times, and helping to make positive change, the decrease in social cohesion that has come about due to redevelopment can potentially have a negative impact on health.

Fully 1/3 of the people who took the time to write in something about what they liked most about their community wrote something about the people, the neighbors, their friends, the diversity of residents, and the community center.

With respect to race and residential segregation, redevelopment has succeeded somewhat in expanding the diversity at public housing. People note that this has come at the expense of African Americans not being able to return to or get into public housing. Decreasing residential and economic segregation can have health gains in terms of a potential decrease in racism, increase in capacity of residents to gain resources, and decrease in crime. However, the question remains as to what happens to those turned away from public housing.

Resident participation is an indicator of a healthy community. At both sites, residents report in the survey a fairly high rate of *involvement* in their community – 41% of people volunteer, go to meetings, help others out in some way. Although our sample was small, and we were only able

to analyze income levels found in our two study sites, higher income survey respondents tend to report high community participation rates. Evidence does not support a high level of involvement in the redevelopment planning process for the HOPE VI redevelopment. Tenant's Associations empowered as a governing body that advises management are nonexistent at both sites, although there are occasional tenant meetings.

When asked what they wanted to change, about 15% responded as to something about the people in the complex. The majority of those responses had to do with people who were loitering, resorting to violence, selling drugs, or other comments relating to "*the bad people*". However, there were a few people who wanted to change the following:

- "*That there would be more unity among inhabitants.*"
- "*I would make people be more considerate and respectful.*"
- "*Nothing except have more residents participating in the community.*"

Recommendations

North Beach Place/Bernal Dwellings specific recommendations

To increase social inclusion and social interaction

- Increase funding and use of Resource Centers
 - Both sites – have the Teen Center/Family Resource Center open longer hours, have more staff, and more programming
 - North Beach Place - Open the Teen Center to all residents for use, with many different programs and services there (see **Youth Programs and Services**).
 - Provide opportunities to Mission Neighborhood Centers staff and Tel-Hi Neighborhood Centers staff for increased training in grant-writing and assist them in identifying grant possibilities.
- Increase resident access and 'management' of community spaces.
 - North Beach Place - Open conference room so it's not under lock and key all the time and residents can actually use it. The need for management approval for community events creates a disincentive to holding social gathering.
 - Both sites – investigate some level of hiring a resident to manage the space use to ensure that it is left clean and respected.
 - Engage residents in solutions for making existing assets for social interaction more usable.
- Improve communication with management (see below suggestions for Tenant Association & communication with management)
- Increase interaction between different cultures/ethnicities
 - Broaden outreach about programs (like some to just Chinese seniors, some to African American youth, etc) so that programs are not just targeted to specific subsets of who lives in the apartments.
 - Promote interracial activities
 - Examine admissions policies with regard to race/ethnicity; Tenant's Association can monitor and make housing policy recommendations.

- Improve communications in general, so more people know about events and programs at the site.
 - Create space to post flyers in other buildings and other places.
 - Have youth write/edit a monthly newsletter, interviewing different members of the community and gathering news about upcoming events.
- Improve safety for residents to enable them to congregate outside in peace.
 - Consider funding a security guard at Bernal Dwellings to bring more safety to common areas
 - Police who patrol near Bernal Dwellings should focus on park law enforcement to make it safer for kids to play there and adults to use it; i.e., enforce the laws that exist around loitering and drugs, and specifically the day laborers.

To increase participation in Tenant's Association/ Resident Council

- Increase participation in Tenant's Associations. Some suggestions included:
 - Hire a resident to be the organizer of the Tenant's Association, and the liaison with management.
 - Provide training and mentorship to Tenant's Association organizer or staff to ensure person has skills and capacity to do cross-cultural, cross-income relationship and community building (potentially connect with other organizers working for racial or economic justice organizations for mentorship/guidance).
 - Seek to have tenants association reflecting the diversity of residents by providing support to enable participation (i.e., meet in wheelchair accessible room, translation/interpretation available, childcare provided, etc.).
 - Investigate offering incentives (determined by the residents) for involvement in Tenant's Associations.
 - Tenant's Association must be democratic and not tied to management, but supported by management.
 - Have a Tenant's Association build alliances with other public housing Tenant Associations across SF, and consults with low-income legal assistance.
 - Implement a shared governance structure between management and residents, with transparent roles and responsibilities for all parties.
 - Investigate funding Tenant Associations with TOP grant from HUD
- Train residents who are interested in being involved in a Tenant's Association
 - Offer technical assistance and training in management, specific skills related to the types of goals the Tenant's Association (e.g., Los Angeles Housing Authority offers a monthly Resident Leadership Training program <http://www.hacla.org/resldtr/>). Include monitoring and evaluation if skills have been used.
 - Tenant's Association should be trained in goal setting, building consensus, facilitation, and monitoring.
 - Technical assistance must be ongoing.
- Improve communication with management

- Tenant's Association – while the Tenant's Association should be able to meet independently, also have regularly scheduled meetings where management meets with the Tenant's Association.
- Offer "office hours" and publicize them widely where residents know they can talk with management about housing complex.
- Through a resident-elected or resident committee-hired liaison. A resident should be hired to be the liaison with management.
- Provide mechanisms for tenants to express management issues directly with the housing authority.
- Involve residents in review of rules with management (perhaps through the Tenant's Association or other format)
- Consider some level of resident management
 - Residents could form a "company" and perform contracted paid services at the site (maintenance, janitorial, programs at the Resource Centers).
 - On a higher level, could be trained and put in charge of making sure maintenance requests are fulfilled.
 - Residents could create and run programming at an expanded Teen Center/Resource Center.
 - Consider other forms of resident management.
- Entrepreneurship opportunities
 - Outreach to residents about entrepreneurship opportunities (for example, at North Beach Place the store on the corner is closing. Spaces were supposed to be available for residents to bid on for entrepreneurship opportunities, but this never materialized with John Stewart management company).
 - This is the type of thing that a lot of tenant organizations nationwide have set as their mission for fellow residents.

SF HOPE recommendations

- Redevelop housing sites in stages.
 - While nationally 14 – 19% of those in public housing had returned to revitalized HOPE VI sites, in communities that had been redeveloped in stages (and one that had a tight, expensive housing market), 40% of residents had returned to the redeveloped sites (Burton, et al., 2002).
- Fund community centers on site with staff and programming.
- Consider some level of resident management/resident contracting for jobs on site.
- Have on-site residents involved in setting rules for each individual site.
- Ensure equal outreach to residents of all ethnicities for programming, notices, rules, and recruitment for Tenant's Associations and meetings.
- Ensure a structure for ongoing communication between residents and management (Tenant's Association, hiring of a tenant to be a management liaison, for example).
- Put resources toward developing Tenant's Associations or Resident Councils that are active, have broad representation, and are independent of management at each site.

- Ensure accountability on commitments that are made during the redevelopment process to residents and other stakeholders.
- Look for healthy opportunities through mixed income redevelopment. Higher income individuals reported high levels of community involvement.

References

- Abt Associates and National Bureau of Economic Research. 2003. Moving to Opportunity for Fair Housing Demonstration Program: Interim Impacts Evaluation. US Dept. of Housing and Urban Development. Office of Policy Development and Research.
- Acevedo-Garcia D, Lochner K. 2001. Residential Segregation and Health. In Ichiro Kawachi and Lisa Berkman (eds.), 2001, *Neighborhoods and Health*, Oxford University Press.
- ACPHD 2008. Life and Death of Unnatural Causes. Health and Social Inequity in Alameda County. Alameda County Public Health Department. Available at <http://www.acphd.org/healthequity/index.htm>.
- Ali SM, Lindstrom M. 2006. Socioeconomic, psychosocial, behavioral, and psychological determinants of BMI among young women: differing patterns for underweight and overweight/obesity. *Euro J Public Health* 16(3):325-31.
- Anderson LM, St. Charles J, Fullilove MT, Scrimshaw SC, Fielding JE, Normand J. 2003. Providing affordable family housing and reducing residential segregation by income: A systematic review. *Am J Prev Med* 24(3S):47-67.
- Arnstein SR. 1969. Ladder of Citizen Participation. *Journal of the American Planning Association* 35(4):216-24.
- Bandura A. 1997. Self-efficacy: The exercise of control. New York: W.H. Freeman and Company, 1-7, 279-313.
- Berkman LF, Glass T. 2000. Social integration, social networks, social support, and health. In *Social Epidemiology*, LF Berkman & I Kawachi (Eds). New York: Oxford University Press.
- Berkman LF, Syme SL. 1979. Social networks, host resistance and mortality: A nine-year follow up study of Alameda County residents. *Amer J Epi* 109:186-204.
- Buron L, Popkin S, Levy D, Harris L, Khadduri J. 2002. The HOPE VI resident tracking study: A snapshot of the current living situation of original residents from eight sites. US Dept of Housing and Urban Development.
- Buron L. 2004. An Improved Living Environment? Neighborhood Outcomes for HOPE VI Relocates. Metropolitan Housing and Communities Center. Abt Associates.
- California Health Interview Survey (2003). Available online at: <http://www.chis.ucla.edu/get-data.html>.
- Cohen S, Underwood LG, Gottlieb BH. 2000. *Social support measurement and intervention*. Oxford University Press. New York, NY.
- Comey J. 2007. HOPE VI'd and On the Move. Metropolitan Housing and Communities Center.
- Conway BP, Hachen DS. 2005. Attachments, grievances, resources, and efficacy: the determinants of tenant association participation among public housing tenants. *Journal of Urban Affairs* 27(1):25-52.
- Council on Environmental Quality. 1997. *Environmental Justice: Guidance Under the National Environmental Policy Act*. Executive Office of the President, Washington D.C.
- Cummins S, Stafford M, MacIntyre S, Marmot M, Ellaway A. 2005. Neighbourhood environment and its association with self-rated health: Evidence from Scotland and England. *Journal of Epidemiology and Community Health* 59:207-13.
- Durkheim E. 1897, reprint 1997. *Suicide*. The Free Press reprint.

- Farquhar SA, Wing S. (2003) Methodological and ethical considerations in community-driven environmental justice research: Two case studies from rural North Carolina. In Community-Based Participatory Research for Health, Minkler M & Wallerstein N (Eds.). Jossey-Bass: San Francisco, CA.
- Fontana AF, Kerns RD, Rosenberg RL, Colonese KL. 1989. Support, stress, and recovery from coronary heart disease: A longitudinal causal model. *Healthy Psychology* 8(2):175-93.
- Geronimus AT, Colen CG, Shochet T, Ingber LB, James SA. 2006. Urban-rural differences in excess mortality among high-poverty populations: evidence from the Harlem Household Survey and the Pitt County, North Carolina Study of African American Health. *J Health Care Poor Underserved* 17(3):532-58.
- Gilhuly K. 2008. Evaluation of community engagement in community policing. Unpublished evaluation, available from City of Oakland, Neighborhood Services Division.
- Gossop M, Green L, Phillips G, Bradley B. 1990. Factors predicting outcome among opiate addicts after treatment. *Br J Clin Psychology* 29(2):209-16.
- Grattidge B, Lawler A. 2003. State of California General Plan Guidelines. Office of Planning and Research.
- Hammack PL, Richards MH, Luo Z, Edlynn ES, Roy K. 2004. Social support factors as moderators of community violence exposure among inner-city African American young adolescents. *J Clin Child & Adol Psychology* 33(3):450-62.
- Healthy Development Measurement Tool (2010), Available at <http://www.thehdmtool.org/indicators/view/236>
- HUD. Strategic Plan FY 2006 – 2011. US Dept of Housing and Urban Development. Available at <http://www.hud.gov/offices/cfo/stratplan.cfm>
- HUD. Code of Federal Regulations. Title 24, Volume 4. CFR 964.11. Available at http://edocket.access.gpo.gov/cfr_2003/apr/qtr/24cfr964.11.htm
- HUD. Fair Housing Laws and Presidential Executive Orders. US Dept of Housing and Urban Development. Available at <http://www.hud.gov/offices/fheo/FHLaws/>.
- Joffe C, Yanow S. (2005). Advanced practice clinicians as abortion providers: Current developments in the United States. *Reproductive Health Matters* 12(24 Suppl):198-206.)
- Kawachi I, Kennedy BP, Lochner K, Prothrow-Stith D. 1997. Social capital, income inequality, and mortality. *Am J Public Health* 87:1491-8.
- Kelly JA. 2004. Popular opinion leaders and HIV prevention peer education: Resolving discrepant findings, and implications for the development of effective community programs. *AIDS Care* 16(2):139-50.
- Kim D, Kawachi I. 2006. A multilevel analysis of key forms of community- and individual-level social capital as predictors of self-rated health in the United States. *Journal of Urban Health* 83(5):813-26.
- Koebel T, Cavell MS. 1995. Tenant organizations in public housing projects: A report on Senate Resolution 347. Prepared for the Virginia Housing Study Commission by the Virginia Center for Housing Research.
- Kreuter MW, Lezin N. 2002. Social capital theory: Implications for community-based health promotion. In *Emerging Theories in Health Promotion Practice and Research*. Eds DiClemente RJ, Crosby RA, Kegler MC. Jossey-Bass, San Francisco, CA.

- Murray CJ, Kulkarni SC, Michaud C, Tomijima N, Bulzacchelli MT, Landiorio TJ, Ezzati M. 2006. Eight Americas: Investigating mortality disparities across races, counties, and race-counties in the United States. *PLoS Med* 3(9):e260.
- North FM, Syme SL, Feeney A, Shipley M, Marmot M. 1996. Psychosocial work environment and sickness absence in among British civil servants: the Whitehall II study. *Am J Public Health* 86(3):332-40.
- Oakley D, Ruel E, Wilson GE. 2009. A Choice with No Options: Atlanta Public Housing Residents' Lived Experiences in the Face of Relocation. A Preliminary Report. Georgia State University. Available at www2.gsu.edu/~wwwsoc/docs/.../RESEARCH_public_housing_report.pdf) or access to public transit
- Poortinga W. 2006. Social relations or social capital? Individual and community health effects of bonding social capital. *Soc Sci and Medicine* 63:255-70.
- Popkin SJ, Katz B, Cunningham MK, Brown KD, Gustafson J, Turner MA. 2004. A Decade of HOPE VI: Research Findings and Policy Challenges. The Urban Institute. The Brookings Institution. Available at <http://www.urban.org/publications/411002.html>
- Putnam R. 2000. *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster. New York.
- Robert S. 1999. Socioeconomic position and health: The independent contribution of community socioeconomic context. *Annual Review of Sociology* 25:489-516.
- Saegert S, Winkel G. 1997. Social capital and the revitalization of New York City's distressed inner-city housing. *Housing Policy Debate* 9(1):17-59.
- Santana-Cruz D. Presentation about Club Moms Program of Peer Health Leaders. Alameda County Public Health Department. Improving Pregnancy Outcomes Program (IPOP). December 1, 2006.
- Syme SL. 1998. Social & Economic Disparities in health: Thoughts about intervention. *The Milbank Quarterly* 76.
- Task Force on Rebuilding Public Housing in San Francisco. 2007. HOPE SF: Rebuilding public housing and restoring opportunity for its residents. Summary of Task Force Recommendations to the Mayor and Board of Supervisors. Available at <http://www.sfha.org/hopesf/index.htm>
- Thomas JC, Eng E, Earp JA, Ellis H. 2001. Trust and collaboration in the prevention of sexually transmitted diseases. *Public Health Report* 116(6):540-7.
- US Census Bureau. Methodology Statement: 2009. Diversity Index – An ESRI White Paper. Available at <http://www.google.com/search?hl=en&client=firefox-a&rls=org.mozilla%3Aen-US%3Aofficial&hs=RFB&q=diversity+index+us+census&aq=f&oq=&aqi=>
- Willimas DR, Collins C. 2001. Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Report* 116:404-16.
- WHO. *The Solid Facts: The Social Determinants of Health*. WHO Europe: Brussels; 2004.

Crime and Safety

Questions for HIA

- How are public housing residents vulnerable to crime and community violence?
- How does public housing redevelopment address issues of crime and safety?
- What are the perceptions of safety in the redeveloped units now compared to before redevelopment?
- Are there resilience factors that help residents cope with crime and feel safer?

Background

The World Health Organization defines violence as the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in, or has a high likelihood of resulting, in injury, death, psychological harm, mal-development or deprivation” (WHO, 2002). Violence is not attributable to any single cause; instead it is the presence or absence of multiple risk and resiliency factors that influences community violence. Risk factors are traits or characteristics that increase the likelihood of an individual or community will be affected by or perpetrate violence. Resiliency factors are protective traits or characteristics that shield an individual or community from violence. (Alameda County Violence Prevention Blueprint, 2009).

Community Risk and Resilience Factors

Risk Factors	Resilience Factors
1. Poverty and economic disparity	1. Economic Capital
2. Illiteracy and school failure	2. Meaningful opportunities for participation
3. Alcohol and other drugs	3. Positive attachments and relationships
4. Firearms	4. Good physical and mental health
5. Negative family dynamics	5. Social capital
6. Mental illness	6. Built environment
7. Incarceration/reentry	7. Services and institutions
8. Community deterioration	8. Emotional and cognitive competence
9. Discrimination & oppression	9. Artistic and created opportunities
10. Media Violence	10. Ethnic, racial, and intergroup relations
11. Experiencing and witnessing violence	11. Media/marketing
12. Gender socialization	

(From: *The Alameda County Violence Prevention Blueprint*. 2009)

A specific risk factor for violence is poor and inadequate housing (Palermo, 1994). Public housing developments are particularly vulnerable to crime and community violence. The high concentration of poverty, poorly constructed buildings suffering from years of neglect,

indifferent management, and ineffective policing can undermine neighborhoods, leaving them susceptible to drug trafficking, gang activity, and violence (Popkin and Cove, 2007). Witnessing or experience acts of violent crime impacts both physical and mental health, particularly with regard to children (Kilpatrick et al., 2003). Additionally, neighborhood disorder (e.g. graffiti, broken windows, vacant lots) is also associated with increased risk for crime and violence (Sampson, et al., 1997). Children growing up in these communities may be at greater risk for school dropout and trouble finding employment (Popkin and Cove, 2007). Additionally, fear of crime and violence can also lead to negative health consequences such as increased stress, social isolation, and reluctance to walk or play outside of the home (Popkin and Cove, 2007; Bennett et. al., 2007). Social disparities are part of a causal pathway that involves crime and poor health (Kawachia, et al., 1999).

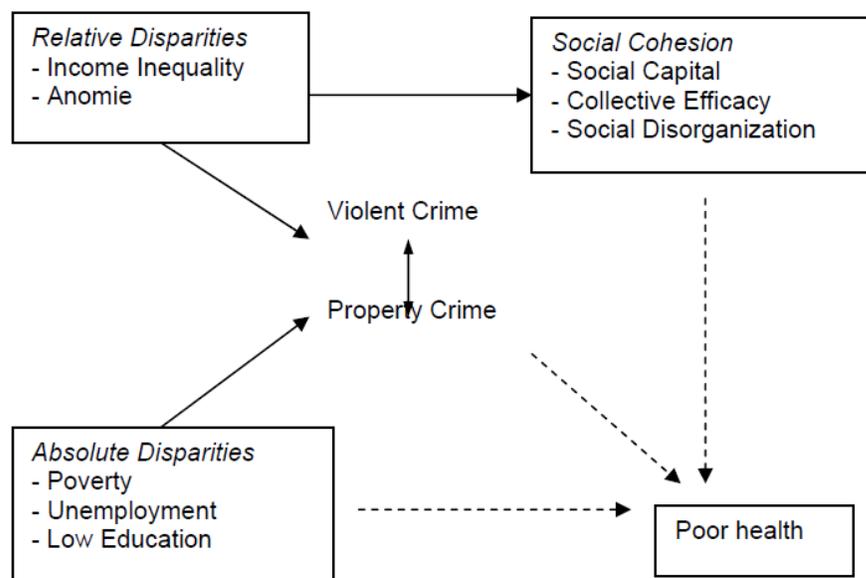


Figure 1

Source: Kawachia I., B.P. Kennedy, R.G. Wilkinson "Crime: social disorganization and relative deprivation" *Social Science & Medicine* 48 (1999) 719-731.

HOPE VI Public Housing Redevelopments provide an opportunity to explore issues of crime and safety through rehabilitating and rebuilding severely distressed public housing as well as through revitalizing surrounding communities. We summarize findings from Bernal Dwellings and North Beach Place, two HOPE VI redevelopments in San Francisco on how redevelopment may have altered public housing residents' perceptions of crime and safety.

Evidence on the relationship between Crime and Safety and Health

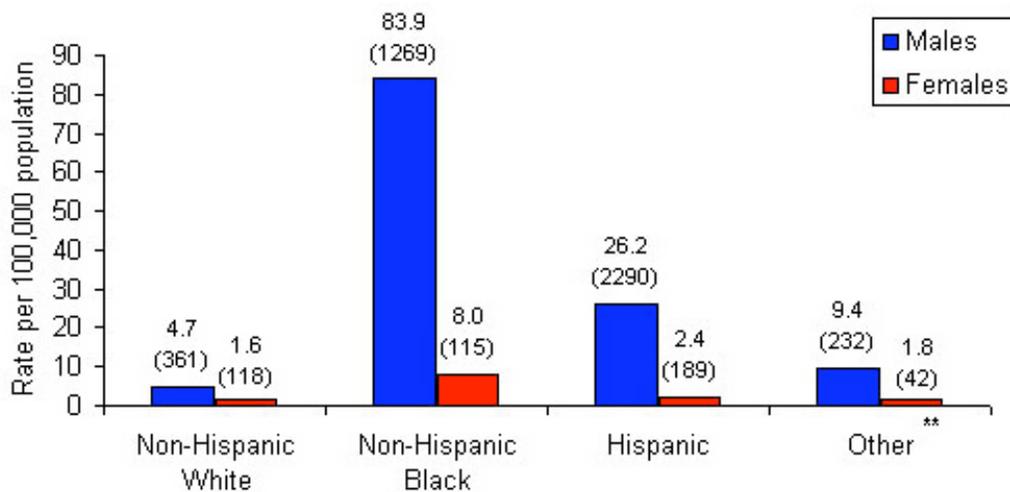
Crime, community violence, and perceptions of safety have been shown to impact both physical and mental health. Adolescents who experienced or witnessed acts of violence have a much

greater risk of suffering from post-traumatic stress disorder (PTSD), major depressive episode (MDE), and substance abuse/dependence (Kilpatrick et al. 2003). Living in neighborhoods of concentrated poverty has been linked to risky sexual behavior and increased risk of sexual assault (Popkin, Leventhal, and Weismann, 2008). Community violence can also lead to social isolation; the decreased sense of social cohesion may exacerbate feelings of anxiety, depression, and stress (see **Social Cohesion** chapter). Theft and burglary also impacts victims financially, many of whom can ill-afford the added strain on resources (Tsang, 2006).

Furthermore, residents' perceptions of neighborhood safety can affect their willingness to engage in regular physical activity. A study of physical activity levels among Boston public housing residents found that when neighborhoods were perceived as unsafe at night, women walked significantly less (17% less) – even during the day – than women who lived in neighborhoods they perceived as safe (Bennett et al., 2007). Walking is the most frequently adopted type of physical activity, particularly among some racial and ethnic groups (Simpson, 2003). Increased physical activity has been associated with a variety of health benefits, including reduced risk of cardiovascular disease, type II diabetes, high blood pressure, osteoporosis, and some cancers (U.S. DHHS, 2001). Other barriers to physical activity may be that parks and other greenspace may often be the site where violent crime occurs (Bennett et al., 2007). Researchers have found that young children, whose parents rated their neighborhoods as unsafe, watched significantly more TV than their counterparts who lived in a neighborhood perceived as more safe (Burdett and Whitaker, 2005). Moreover, there is an inverse relationship between time spent watching TV and time spent in outdoor play; studies have found that young children who watch less than 2 hours of TV spend 30 minutes more time playing outside than those that watch more than 2 hours (Rideout, et al., 2003).

Violent crime (rape, robbery, aggravated and simple assault) disproportionately affects vulnerable groups in society – including young people, ethnic minorities, and the elderly. Homicide is the second leading cause of death among youth aged 10–24 years both in California and nationally (CDC, 2009). Violence is also a major cause of nonfatal injuries among youth (CDC, 2009). Homicide disproportionately affects young African American men between the ages of 10-24. When a young person suffers a violent death, many years of potential human life are lost.

Homicide Rates* Among Persons Ages 10-24 Years, by Race/Ethnicity and Sex, California, 2001-2005



* Race/ethnicity-specific rates and number of deaths (in parentheses) are provided above each bar. Rates are not presented where there were fewer than 20 deaths because they are statistically unreliable.

** Other Includes American Indian/Alaskan Native and Asian/Pacific Islander

(Source: US CDC, 2009)

The key to community violence prevention is to minimize the risk factors and maximize resiliency factors for violence. Public housing redevelopment can minimize risk factors by replacing dilapidated buildings and rehabilitating the surrounding common areas. Further, economic disparity can be addressed through redevelopment plans that provide incentives for business and retail that hire residents of the housing development.

Redevelopment also has the potential to strengthen resilience factors such as social capital and positive attachments and relationships. Redesigning buildings so that houses face each other can create a sense of more “eyes on the street.” Neighbors who live on small streets with little traffic tend to visit each other more (Local Government Commission Center for Livable Communities, 2009). Residents of buildings with green space had a stronger sense of community and reported less violence in dealing with domestic disputes (PolicyLink, 2002). Convenient and affordable transportation facilitates people’s access to jobs and resources (Alameda County Violence Prevention Blueprint, 2009). Beyond promoting social interaction and community stability, land use decisions around housing can be used to build a solid tax base to fund needed violence prevention services, (for example, arts and culture, anger management, grief counseling, and gender equality programs) in addition to providing dedicated spaces for young people to gather as a meaningful alternative to loitering. Indeed, the City of Oakland is considering a Public Safety Parcel Tax to generate revenue for numerous

services aimed at improving safety and reducing crime (City of Oakland, 2010). Moreover, a study of “willingness to pay” in California found that the public is willing to pay on the order of \$5 per year to support for some violence prevention programming (e.g., reducing domestic violence) (Sorenson, 2003).

Public housing redevelopment provides an opportunity for mobility during the redevelopment phase when residents are placed into alternative housing. HOPE VI residents who used vouchers to move to private-market housing reported vast improvements in quality of life due to living in safer, and lower poverty neighborhoods (Popkin and Cove, 2007). Benefits include “allowing children to play outside more frequently, less fighting among neighborhood children, sleeping better, and generally feeling less worried about drug dealing and shootings in the neighborhood” (Popkin and Cove, 2007). Despite the physical and psychological stresses of displacement (see **Displacement** chapter), Popkin and Cove emphatically state *“There is no question that the enormous improvement in safety and consequent reduction in fear of crime is the biggest benefit of HOPE VI revitalization for many original residents”*.

Violence prevention in public housing requires a long term strategy and commitment from the police, housing authority, and residents to work together. Evidence exists from Philadelphia public housing on the success factors and challenges with one particular community policing program (Collins, et al., 1999). The objective of the program was to increase police visibility, tie in policing with other social services, create residents “ownership of the police” (ie., gain a level of familiarity between the community and the police), improve the quality of policing through the use of technology, and focus on problem solving. A concept of “policy equals” was implemented, in which the community was actively sought for advice in policing decisions. Most enlightening are the challenges the program faced, which largely had to do with the need for significant commitments from the police, the community, and especially the housing authority that provides for maintenance and social services. Ongoing participation from all parties was a key factor.

Standards

Federal Guidance

Healthy People 2010 put forth the following objectives to be achieved by the year 2010:

- A rate of homicides no greater than 3.0 per year per 100,000 people
- A rate of rapes or attempted rapes no greater than .7 per year per 1,000 people.
- A rate of physical assaults no greater than 13.6 per year per 1,000 people aged 12 years or older.

Local Guidance

- San Francisco General Plan. Community Safety Element.
http://www.sfgov.org/site/planning_index.asp?id=41420
- The San Francisco Healthy Development Management Tool (HDMT www.thehdmtool.org) establishes safety-oriented development benchmarks based on the SF Violence Prevention Plan (SF Mayors Office, 2008):

Benchmark #1: Does the project include environmental design elements and community programs that protect and enhance public safety? Actions consistent with this benchmark would include but are not limited to:

- analyzing and improving environmental quality for bicyclists and pedestrians
- using traffic calming devices on interior streets
- contributing street trees
- meeting or surpassing city standards for adequacy of sidewalk and street lighting
- designing front entrances to buildings to be seen from the street and other front doors
- limiting the number of alcohol, tobacco and firearm outlets
- supporting community policing, neighborhood watch groups, and, community organizing related to blight abatement

Benchmark #2: Does the project include environmental design elements and community programs that promote and enhance social interaction and integration? Actions consistent with this benchmark would include but are not limited to:

- incorporating public open space, public parks, public plazas, recreational centers, community facilities or other gathering places into project design
- enhancing access to existing neighborhood or regional parks and recreational facilities
- funding maintenance or programming at parks, recreational centers, public art or public performance spaces
- having porches oriented towards streets and public spaces
- supporting the development of intentional housing co-operatives, collectives or cohousing
- sponsoring a neighborhood organization that supports community building
- sponsoring civic and cultural activities that promote social interaction

Benchmark #3: Does the project promote educational, afterschool, and other related opportunities for youth? Actions consistent with this benchmark would include but are not limited to:

- using schools as multi-use community facilities
- funding school infrastructure development explicitly for use as multi-use facilities

- supporting arts, afterschool programs, and other activities in recreation centers, parks, and schools
- funding cultural events using local parks, recreation and open spaces

Benchmark #4: Does the project promote economic opportunities for low income and underemployed or insecurely employed individuals? Actions consistent with this benchmark would include but are not limited to:

1. promoting reliable and affordable transportation to jobs
 2. hiring locally for construction, retail, maintenance, and landscaping
 3. providing self-sufficiency wages and benefits in project-associated employment
 4. preserving PDR jobs
 5. conducting job training or skills development for low income and underemployed local residents in expected commercial uses
- The SF Police Department’s mission statement (<http://sf-police.org/index.aspx?page=1616>) is to “protect life and property, prevent crime and reduce the fear of crime”, with these fundamental values that guide their action:
 - Our Highest Priority is the Protection of Human Life
 - We Believe that while Crime Prevention is our Principal Goal, We should Vigorously Pursue those who Commit Serious Crimes
 - We Treat Members of the Public with Respect and Dignity. We Maintain the Highest Levels of Integrity and Professionalism in all Actions
 - We Recognize that the Department Members are its Greatest Asset and Assume Responsibility to Treat Them Professionally and Support Their Professional Development
 - We are committed to Solving Neighborhood Problems. We Care about the Quality of Life in the City's Neighborhoods and Believe that our Services Must Answer their Needs
 - We Maintain Open Communication with all the Communities We Serve. Their Input Helps to Determine Police Policies, Priorities and Strategies
 - We Believe That Policing Strategies Must Preserve and Advance Democratic Values
 - We are Committed to Managing Our Resources in a Careful, Efficient and Effective Manner
 - The SF Police Department’s 2007 annual report lists crime statistics for each SF district, and ongoing community policing and crime reduction efforts, outreach programs, accomplishments, gang task force work, and case studies of homicides.
 - Each housing site management company enforces a set of housing rules.

- The HOPE SF Task Force Recommendations make no explicit mention of crime or violence. Some of principles in the HOPE SF Recommendations have potential impacts on crime and safety for public housing residents, which include:
 - Create an Economically Integrated Community
 - Provide Economic Opportunities Through the Rebuilding Process
 - Integrate Process with Neighborhood Improvement Plans
 - Enhanced Public Safety
 - Neighborhood Economic Development
 - Build a Strong Sense of Community

Existing Conditions and Assessment of Redevelopment Impact on Crime and Safety

Below are the findings from key informant interviews and the Health and Redevelopment survey.

Neighborhood factors

Perceptions of crime and safety at each housing site can be contrasted against the crime situation for the neighborhood and city. In San Francisco, the 2009 homicide rate was approximately 6 per year per 100,000 people (SFDPH, 2009), lower than the previous year, but still well above the Healthy People 2010 target (stats provided in the Appendix, maps of crime can be found in **Neighborhood Conditions** chapter of this HIA). While not SF-specific data, the homicide rate for African American men in California between 2001-2005 was 21 deaths per year per 100,000 people (CDC, accessed August 2009).

Based on **Neighborhood Conditions** analysis of data from SF HDMT/SFPD, between 2005 and 2007, over 20% of all San Francisco homicides occurred within a 1 mile radius of Bernal Dwellings, which is in stark contrast to the approximate 5% of homicides that occurred within a 1 mile radius of North Beach Place. Though the percentages for sexual assault were more evenly distributed between the two housing developments, Bernal Dwellings still experienced a higher percentage of the total reported sexual assaults for each buffer zone compared to North Beach Place. Similarly, there was a higher percentage of physical assaults committed within the buffer zones surrounding the Bernal Dwellings housing site than the North Beach Place housing site. While over 16% of reported physical assaults occurred within 1 mile of Bernal Dwellings, less than 10% occurred within 1 mile of North Beach Place.

North Beach Place is located in a tourist area. Additionally, the redevelopment includes mixed income housing and retail outlets like Trader Joe's and Starbucks. More tourists as well as mixed use translates to potentially more "eyes on the street", which could deter both would-be-criminals as well as police harassment. Thriving businesses, convenient transportation that facilitates access to employment, and higher median income could potentially increase the economic capital of the neighborhood. Further, there are a multitude of resources close by that are accessible to residents of North Beach Place (swimming pools, after school programs, a

Boys and Girls club, and free indoor and outdoor gyms nearby). These resources provide meaningful alternatives for youth to spend their free time. Police enforcement may be greater due the development's location in a tourist environment.

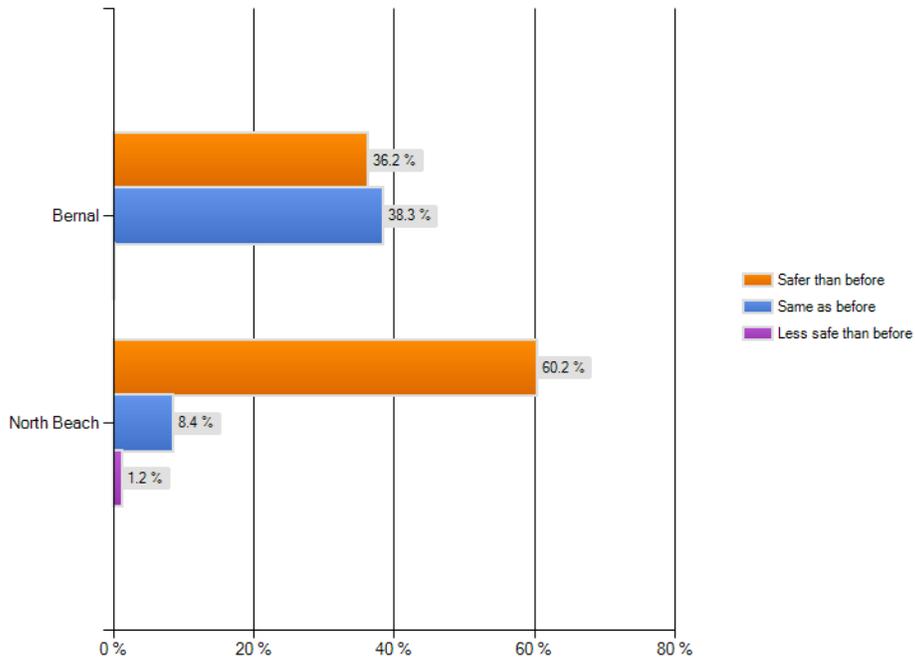
The neighborhood surrounding Bernal Dwellings is less safe than North Beach Place. Unlike the mixed use North Beach Place, Bernal Dwellings is a purely residential development, though it is located in the Mission District – a culturally and economically vibrant neighborhood. Generally, restaurants and other retail are located a few blocks away rather than surrounding the development, so there are less “eyes on the street.” Additionally, perhaps because of proximity of the site to the freeway and a major arterial (Cesar Chavez Street), a large number of day labors congregate around Bernal Dwellings. Some residents perceive the day labors as drug dealers, and people who harass residents. Gangs are still present and recruit vulnerable youth. Some of the youth feel they cannot leave the four-block radius of Bernal Dwellings unless they are in a car for fear of rival gangs. Almost everyone we interviewed had a story of they themselves or someone they loved had been threatened, shot at, or killed. Key informants mentioned the center as the only resource for teens to be off the streets. Many residents at Bernal perceive the police as harassers rather than protectors.

Perceived Changes in Safety after Redevelopment

Based on resident surveys, we found that the majority of North Beach Place residents felt that their community is safer now than before redevelopment, while in Bernal Dwellings, slightly more residents felt that there had been no change in the level of safety. Similarly, when asked about the frequency with which criminal or violent acts occurred within the housing developments over the last 12 months, Bernal Dwellings reported much higher rates of each individual criminal or violent act than North Beach residents. The survey results regarding perceived safety reflected this same trend. Residents of Bernal Dwellings on average felt less safe in the neighborhood, as well as less safe walking around at night, than residents of North Beach Place.

Perception of Safety Before and After Redevelopment

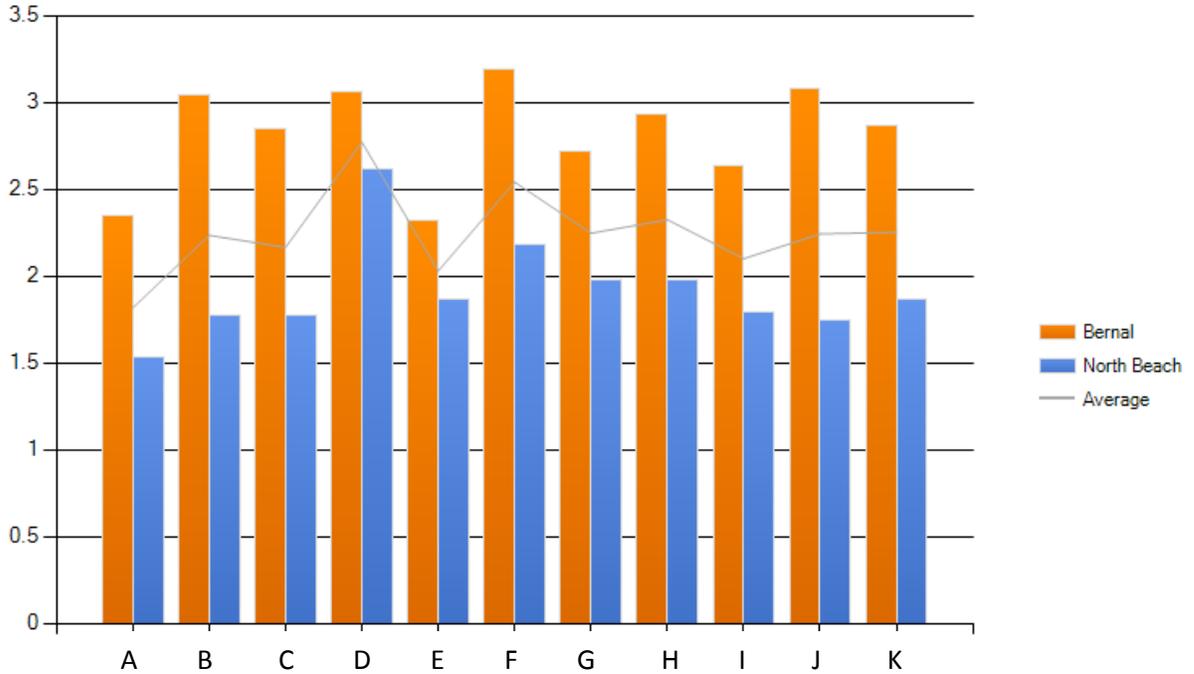
Compared to before redevelopment, how safe do you feel?



(People who answered "I don't know" are not represented in the graph)

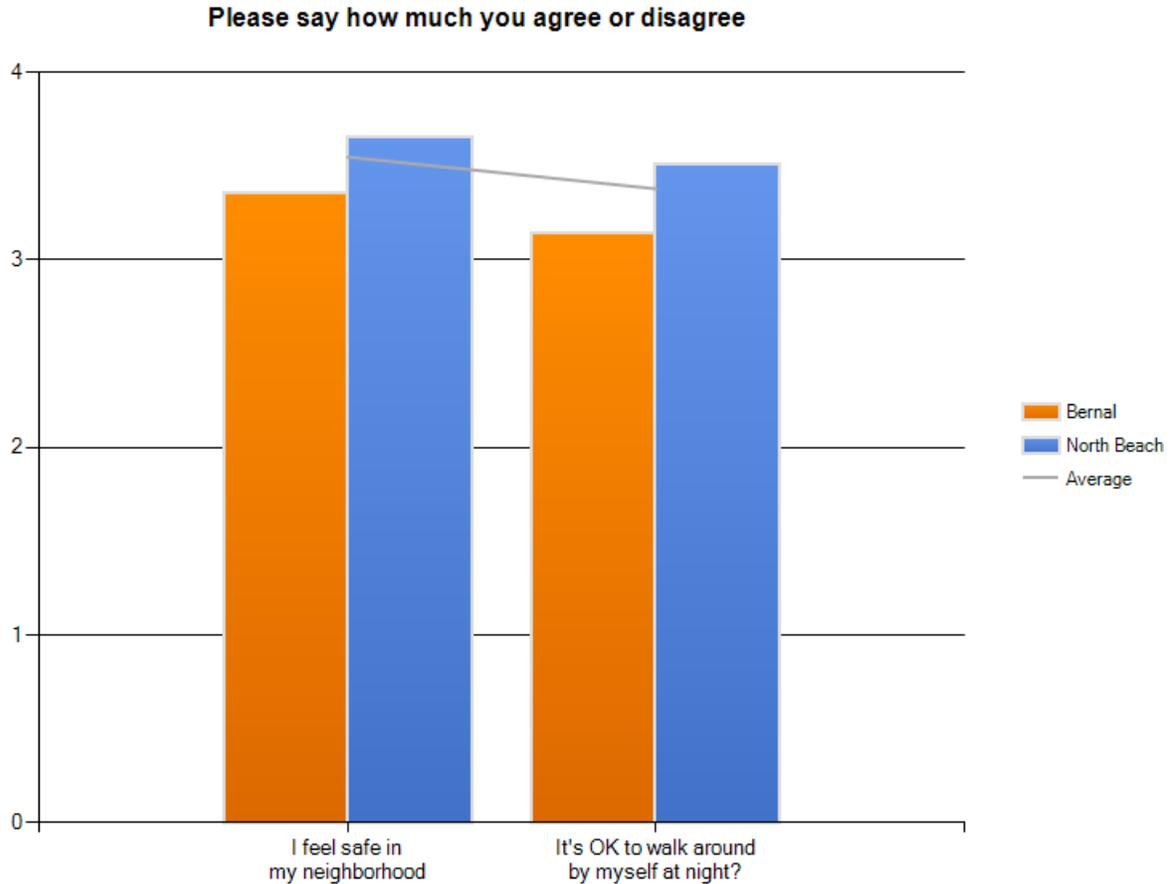
Average sighting of criminal or violent acts in the last 12 months (0 = never, 4 = often)

In this housing complex in the last 12 months, have you ever heard, experienced, participated in, or witnessed the following:



- A. Robbery or breaking into a home
- B. Shootings
- C. Fist fights
- D. Loud arguments
- E. Racial or ethnic harassment
- F. People being arrested
- G. Drunk and disorderly behavior
- H. People using illegal drugs
- I. Gang activity
- J. Police harassment
- K. Other

Perceived Safety (0 = strongly disagree, 4 strongly agree)



Key informant comments mirrored this same striking difference. Residents of North Beach Place felt strongly that the housing development was much safer both before redevelopment and other public housing developments in which they had lived. *“Before it was ‘The Projects’, shooting and all that. After, crime rate went down. The apartments improved, the doors are more tight, the windows are steel. Everything is brand new.”* Many interviewees stated that the safer environment is why they moved to North Beach Place. According to one key informant who had lived there both before and after redevelopment, *“there is less stigma associated with living here”* because of the decrease in crime. Another interviewee said, *“now it’s peaceful and calm.”* There were also several people who stated that violence and crime still occur, but at a much lower level.

At Bernal Dwellings, however, residents expressed their concerns over safety. *“There’s a lot of violence here – shooting, stabbing, home invasions, police harassment. Something happens every day”*. Residents shared stories about being shot at and threatened with guns, particularly after the on-site security guard was let go due to lack of continued funding. *“When they had a security guard, crime was down. Then they fired him because of lack of funds. Right after that, the crime level went sky high. It got so bad that my grandbaby would hear a firecracker and run*

and hide.” Gangs recruit teens and young children at an early age; youth are in danger of being drawn into drugs, drug dealing, crime, and violence. Further, residents feel there is no safe place for teens to hang out other than the Center, which closes at 5 pm. *“The kids are in the street as they have nowhere to go. When they come here (to the center) they enjoy [themselves] and stay out of trouble.”* The enclosed play area belongs to the day care and cannot be used by residents; parents worry about the safety of their children alone at the park. Thus, children play on the road in front of the house where parents then worry about unintentional injury from cars driving through the complex.

Relationship with Police

Additionally, the relationship between law enforcement and Bernal Dwellings residents is strained. Almost all of the interviewees expressed distrust of the police. Residents gave examples of racial tension between residents and police, stories of how police searched people for no reason (including young children when they are alone without parental consent), threatened people, beat them, and addressed them in sexually inappropriate ways. Some people said that the police are present, but do not do their job in addressing bigger problems such as crime and drugs. *“If police come it’s to target individuals who are not doing anything. They are guilty by being black. I have seen the police beating people up, slamming them onto the pavement. They search individuals when they have no rights. I experienced it as well.”*

At Bernal Dwellings, during the redevelopment planning process, residents had wanted a gated community because they wanted to be able to protect themselves from rival gang activity and anonymous aggression, but instead the redeveloped complex was split with a road so the police can patrol conveniently. However, this openness had unintended consequences with regards to police harassment: *“Now it’s more open so they think they (the police) can see everything. It seemed like the police were scared before [redevelopment] and now they’re not scared. I’ve heard them say things like, ‘I can’t wait until you turn 18 because then I can put you away, and, ‘I’m going to beat the shit out of you.’ They beat people, tackle people.”* The Center is the only place residents said they felt safe from police harassment.

In an interview with an advisor on the HOPE VI redevelopments in San Francisco (see Appendix), we learned that safety was definitely a problem before redevelopment, as were many other issues associated with the dilapidated public housing. The advisor said that during the planning process for the North Beach Place redevelopment, there was good understanding and support among residents for the new design, and how it would affect safety. According to the interview, improving personal safety was a major design goal for North Beach Place. This included having a secure perimeter with a limited number of entry points, front door and sense of entry into every unit, so people would feel they had a front door/ownership/personal safety, and breaking up open space in smaller elements so residents could acknowledge and keep an eye on who belonged at the housing site and who did not.

Displacement

One negative consequence of the redevelopment was that many of the people who lived there before did not come back (see **Displacement** chapter). Some residents left because they preferred their new section 8 homes; others because they had criminal records and could not be return to public housing. If redeveloped areas are safer only because hard to house residents are being eliminated, it raises questions: Where will they go? Has crime just been displaced somewhere else?

The Role of Management

At both sites, interviews with management (Appendix) suggested that rules were in place to ensure safety of the residents. From management's perspective, involvement in crime is a reason for eviction. For example, management at Bernal said serious crimes such as a homicide or a shooting in a unit would result in eviction right away. Similarly at North Beach, management said possession or sale of drugs and any sex offences would result in eviction. The rules extend to visitors also. Management at North Beach said that if a visitor of a resident starts a fight, the resident will held responsible.

At North Beach Place the responsive management keeps the apartments and development well-maintained. On-site security and cameras are used by management to ensure safety and enforce the rules. Although people complain about the strictness of the rules, they express a lot of pride and gratitude for living in such a nice place. One young woman said that she worried about getting evicted because she really liked living at North Beach Place and did not want to have to move.

At Bernal Dwellings, graffiti, broken windows, garbage, and vacancies are tell-tale signs of an unsafe community. Many residents' comments concerned the slow response of management in dealing with maintenance issues. Often it was felt that management had not lived up to its role in maintaining safety. An onsite security guard made people feel safer, but after he was let go through lack of funds, key informants reported that crime increased. Another resident commented that a bullet lodged into a doorframe was not removed for three years; a constant reminder of the shootings that occurred.

One of the challenges expressed by residents and management was need for balancing enforcement of strict rules to ensure safety with resident's perceptions of being controlled and evicted. There was a feeling among residents that evictions seem targeted and not transparent. *"If she (manager) thinks they're affiliated in any way with gangbangers, the manager wants them out. Even if they are not involved themselves in gangs and drugs. She'll go after old people, people's grandmas."* Even if the person on the lease has not done anything wrong, management can evict based on what someone living with them has done, or what friends have done – even if the incident occurred in the distant past. *"People have gotten evicted for stuff that happened three years ago!"* In one case, an incident happened 2 years

before, and the case was closed, but the management reopened the case and subsequently evicted the tenant based on something the lease-holder's daughter had done. Residents were very upset with the lack of "benefit of doubt" in these situations. Hence, even well-meaning enforcement of rules aimed at improving safety become intertwined with issues of displacement, stress, and fear when the rules and their enforcement may not be clear to residents.

Programming for Youth and Adults

One of the most beneficial outcomes of redevelopment was the establishment of the Mission Neighborhood Community Center at Bernal Dwellings. The Community Center stands out as a very strong resilience factor. Teens have a place to go to be with friends instead of hanging out in the streets and parents have a resource to turn to when they or their children are experiencing trouble. Nearly everyone interviewed praised the center and in particular the center director, Ginale Harris, a committed, hard-working advocate for the residents. One resident even went so far as to say "*We need more community centers so the kids won't get into trouble. If there were more [centers], then maybe a lot of teens would still be alive.*"

The Center seems to be a positive force in residents' lives, which provides programs, services, as well as advocacy to residents. Interviewees expressed how the Center's staff had worked with them to discuss resident eviction cases with management, had helped their children get jobs, had supported them in times of mental distress, and had helped them with the school district. Because the Center's staff understand the public housing system, they are able to offer services to help residents navigate the system.

Residents spoke of working or volunteering at the Center as a way to give back or to stay out of harm's way – both to protect themselves from crime and violence taking place in or near Bernal Dwellings as well as staying away from temptation of getting involved in criminal activities. People use the computers and internet at the Center, and have gotten job counseling and services through the Center. Students get help with their homework and are able to concentrate on their studies. People like anger management resources, the food bank, the toy drive, and vacation planning/funding.

Conclusions and Recommendations

Crime and safety have been, and continue to be priority concerns for public housing residents. In HOPE VI there was recognition that poor public housing was associated with social hazards leading to crime and violence. Moreover, HOPE VI had a vision that good public housing would alleviate stress associated with affordable living and social exclusion, which relate to crime.

At North Beach Place, redevelopment has had a positive impact on crime and safety levels. Some of this may be due to better consideration of safety in the design and planning process for redevelopment, management that is strict on rules, but also maintains the property well

and employs on-site security. Inclusion of mixed use and being situated within a tourist area may also lead to more eyes on the street, and better police enforcement.

At Bernal Dwellings, redevelopment has had a minor positive impact on crime and safety. There remains fear of gang related activity on one hand, and police harassment on the other. In retrospect, many of the residents were not happy with the open nature of the residential site, which created a sense of vulnerability. Poor maintenance contributes to safety concerns. Ongoing concerns over crime and safety have resulted in residents seeking a safe haven – the community center serves an important role in keeping youth out of trouble, providing programming and services to residents, and engaging residents in community activities.

At both sites, there were mixed reactions to the role of management rules in ensuring safety. While these rules may be deterrents to criminal activity, it was clear that there were many misunderstandings concerning the rules, which resulted in fear, and the perception that they were in place only to evict residents. As previously discussed, fear of eviction can negatively impact health of residents and potentially inhibit social cohesion.

In summary, public housing redevelopment has the ability to mitigate some of the risk factors associated with violence; however it is clear that a one-time investment in redevelopment is not sufficient in keep levels of violence low, particularly in areas where there is not an added incentive (e.g tourism, market rate housing) for others to keep the neighborhood safe. Instead, a commitment must be made to maintain the buildings, and provide ongoing security and violence prevention services to the residents.

New HOPE SF redevelopment does not explicitly mention crime and safety issues in the HOPE SF redevelopment plans. The issue of crime and safety is the number one concern for public housing residents, and explicit planning process that engages residents, the community, police, housing authority, and housing management is greatly needed.

Recommendations

Bernal Dwellings

1. Fund a position for an on-site security guard. (Management Company; SF Housing Authority)
2. Management should maintain both the inside and outside of apartments in a timely fashion, and be more transparent about rules and eviction policies.
3. Establish a process for dealing with hard to house residents; don't just evict them (SF Housing Authority)
4. Get input from residents and police about police harassment; from outreach feedback create programming for all (e.g., sensitivity training, safe sessions facilitated by others where both sides can participate, making a processes available to resolve harassment complaints).

5. Work with police, day laborers, public housing and surrounding residents on gang and violence reduction activities in the housing sites and surrounding neighborhood.
6. Continue to fund the Family Resource Center: expand programming, staffing, and hours open; and monitor use to ensure that the most useful programs continue to be offered to residents. (SF Housing Authority; SF Department of Children, Youth, and Their Families)
7. Increase community center capacity to provide programs and services, and to act as safe havens against crime (e.g., Encourage and improve capacity to find and write grants, sending staff to workshops).
8. Work with day laborer advocates to create opportunities for day laborers that alleviate crime and safety concerns for public housing residents.

North Beach

1. Begin a structured conversation with residents about which rules seem excessive. Dialogue with management and to see about compromise. (Management company, SF Housing Authority; Mayor's Office of Housing)
2. Establish a process for dealing with hard to house residents; don't just evict them (SF Housing Authority)Continue on-site security (Management company)
3. Continue and make better use of on-site programming and services, particularly youth programming to deter their involvement in crime. (SF Housing Authority; SF Department of Children, Youth, and Their Families)

HOPE SF

1. Explicitly acknowledge the importance of crime and safety in the planning process. (SF Housing Authority; Mayor's Office of Housing)
2. Engage residents, community members, police, housing authority, and management in proactive measures to reduce crime and improve safety as part of the redevelopment process. (SF Housing Authority; Mayor's Office of Housing)
3. Create long-term and ongoing solutions to reduce gang activity and neighborhood-level crime (e.g., consider the SF Violence Prevention Plan (SF Mayors Office, 2008) in the context of redevelopment at each site). (multiple agencies listed in the Violence Prevention Plan)
4. Find sustainable strategies for on-site programs and services that engage residents, particularly youth in activities that create resilience to crime. (SF Housing Authority; Mayor's Office of Housing) We note that SF Department of Children, Youth and their Families (SF DCYF) has a Violence Response program http://www.dcyf.org/Content.aspx?id=1330¬e=1456&ekmense1=14_submenu_28_b_tnlink
5. Address economic disparity through redevelopment planning that provides longer term incentives for business and retail that hire residents of the housing development.
6. Employ design elements and mixed use that maximize visibility, protection, and community policing. (SF Housing Authority; Mayor's Office of Housing)
7. Acknowledge neighborhood-level differences in crime and the factors associated with crime that will require specific planning processes and participation to find unique

rather than one-fits-all solutions to ensure safety. (SF Housing Authority; Mayor's Office of Housing; SF Police Department)

References

- Alameda County Violence Prevention Blueprint, accessed August 2009
- "A Primary Prevention Framework for Substance Abuse and Mental Health." San Mateo County Health System: Behavioral Health & Recovery Services. 2009.
- "A Lifetime Commitment to Violence Prevention." The Alameda County Blueprint. Accessed on: July 6, 2006: <http://www.preventioninstitute.org/alameda.html>
- Bennett GG, McNeill LH, Wolin KY, Duncan DT, Puleo E, et al. (2007) Safe To Walk? Neighborhood Safety and Physical Activity Among Public Housing Residents. *PLoS Med* 4(10): e306. doi:10.1371/journal.pmed.0040306. Accessed August 2009
- Burdette, HL. and Whitaker, RC. (2005): "A National Study of Neighborhood Safety, Outdoor Play, Television Viewing, and Obesity in Preschool Children." *Pediatrics* 116, 657-662.
- Centers for Disease Control and Prevention National Center for Injury Prevention and Control (NCIPC). Youth Violence Stats at glance. Available at http://www.cdc.gov/ViolencePrevention/youthviolence/stats_at-a_glance/CA.html. Accessed August 2009
- City of Oakland. 2010. Proposed Ordinance Establishing A Temporary Parcel Tax Solely To Assist the City In Preserving, Protecting and Enhancing "Vital Public Safety And Violence Prevention Services. Draft resolution available: <http://clerkwebsvr1.oaklandnet.com/attachments/25495.pdf>
- Collins, et al., 1999. Implementing Community Policing in Public Housing: Philadelphia's 11th Street Corridor Program – Final Report. Available at: <http://www.ncjrs.gov/pdffiles1/nij/grants/179980.pdf>
- Crime Statistics, San Francisco from The city rating.com Data source: 2003 FBI Report of Offenses Known to Law Enforcement <http://www.cityrating.com/citycrime.asp?city=San+Francisco&state=CA> accessed August 2009
- HOPE SF: REBUILDING PUBLIC HOUSING AND RESTORING OPPORTUNITY FOR ITS RESIDENTS Summary of Task Force Recommendations to the Mayor and Board of Supervisors March 23, 2007
- Kawachia I., B.P. Kennedy, R.G. Wilkinson "Crime: social disorganization and relative deprivation" *Social Science & Medicine* 48 (1999) 719-731
- Kilpatrick, D. G. Ruggiero, K. J. Acierno, R. Saunders, B. E.; Resnick, H. S. Best, C. L., 2003, Violence and Risk of PTSD, Major Depression, Substance Abuse/Dependence, and Comorbidity: Results From the National Survey of Adolescents, *Journal of Consulting and Clinical Psychology*, 71 (4) 692-700.
- Local Government Commission Center for Livable Communities. "Land Use planning for safe, Crime Free Neighborhoods." Available at: http://www.lgc.org/freepub/community_design/factsheets/plan_safe_neighborhoods.html Accessed August 2009

- Palermo, GB (2004) *Faces of Violence*, 2nd edition, Charles C Thomas Publisher, Ltd.
PolicyLink. Reducing health disparities through a focus on communities. A PolicyLink Report.
Oakland, CA: 2002.
- Popkin and Cove, 2007, *Safety Is the Most Important Thing: How HOPE VI Helped Families*,
Urban Institute, <http://www.urban.org/url.cfm?ID=311486>
- Popkin, Leventhal, and Weismann, 2008, *Girls in the 'Hood: The Importance of Feeling Safe*,
Urban Institute, <http://www.urban.org/url.cfm?ID=411636>
- Rideout VJ, Vandewater VJ, Wartella EA. *Zero to Six: Electronic Media in the Lives of Infants,
Toddlers and Preschoolers*. Menlo Park, Calif: Henry J. Kaiser Family Foundation; 2003
- Sampson RJ, Raudenbusch SW, Earls F (1997). Neighborhoods and violent crime: A multilevel
study of collective efficacy. *Science* 277;(5328):918-24.
- SF Mayors Office, 2008. Violence Prevention Plan, available at:
http://www.sfgov2.org/ftp/uploadedfiles/mocj/reports_publications/Violence_Prevention_Plan.pdf
- SFPD, 2007 Annual Report, available at <http://sf-police.org/index.aspx?page=3145>
- SFPD, 2009 CompStat Report for Citywide Dec 26, 2009, available at <http://sf-police.org/index.aspx?page=3256>
- Simpson, ME, Serdula, M, Galusak, DA, Gillespie, C, Donehoo, D, Marcera, C, Mack, K. (2003)
"Walking Trends Among U.S. Adults: The Behavioral Risk Factor Surveillance System, 1987-
2000." *American Journal of Preventative Medicine* 2003; 25(2)
- Sorenson, S. B. (2003). "Funding public health: The public's willingness to pay for domestic
violence prevention programming." *Am J Public Health* 93(11): 1934-8.
- Tsang, Suzanne. "Mac Arthur BART Transit Village Health Impact Assessment." (2007):
<http://ehs.sph.berkeley.edu/hia>.
- U.S. Department of Health and Human Services. 2001 The Surgeon General's call to action to
prevent and decrease overweight and obesity. Available at:
<http://w.surgeongeneral.gov/topics/obesity/>
- US CDC, 2009 Youth Violence: State Statistics. From:
http://www.cdc.gov/ViolencePrevention/youthviolence/stats_at-a_glance/CA.html; accessed August
2009

Youth Programs and Services

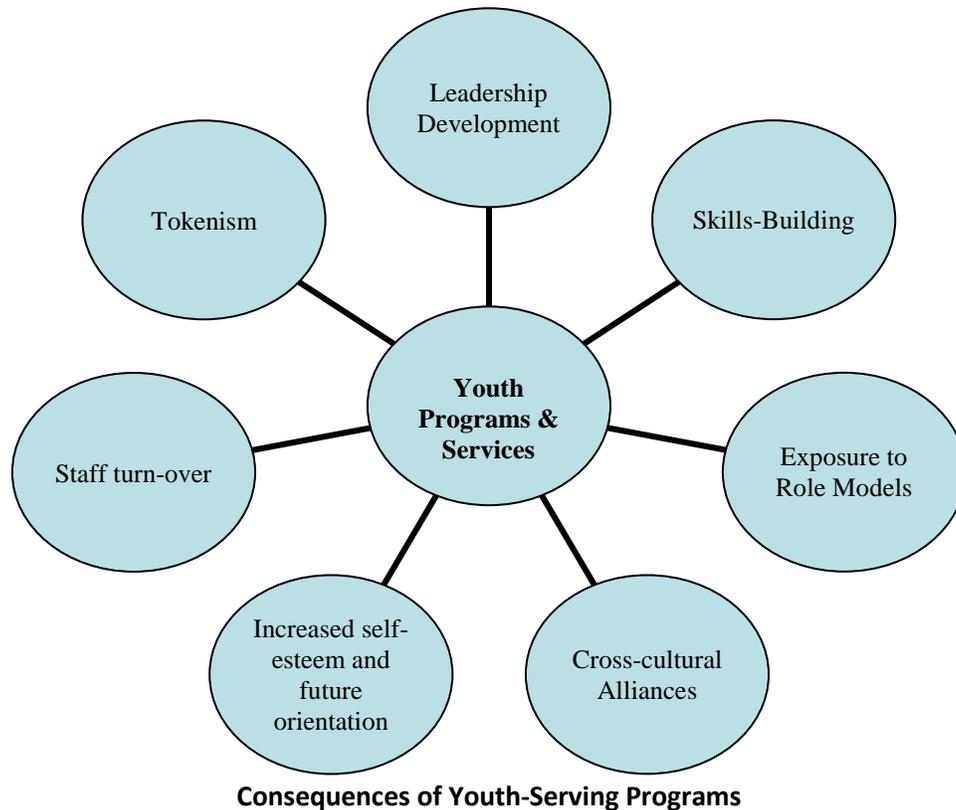
Questions for HIA

- How does engagement of youth residing in redeveloped public housing in on-site programming impact health outcomes?
- How can youth programming be tailored to foster sustained positive health outcomes?
- How can youth gain a stronger sense of connection to their communities?
- Does redeveloped public housing have adequate and appropriate youth programming and services?
 - If so, are these youth faring better?
- What leadership, technical, and personal development skills are fostered by engagement of youth in on-site programming?
- Does engagement of youth residing in redeveloped public housing in programs and services lead to job readiness?
- Does youth engagement in local programming mediate cross-cultural tensions in public housing complexes and neighborhoods undergoing redevelopment?
- Does youth engagement in local programming impact school performance?

Background

One of the most unique characteristics of HOPE VI is its attempt to combine both resident- and place-based community development models into one redevelopment strategy. In addition to funding the rehabilitation of the most severely distressed housing, HOPE VI also allocated federal funds to assist local housing authorities with the relocation of displaced residents, and to fund Community and Supportive Services (CSS) for residents during the HOPE VI grant period (Slingluff 2006). The CSS funds were intended to provide services that would assist and enable residents to improve their families' self-sufficiency. CSS services were intended to focus on clinical case management and workforce development (Slingluff 2006). With such a focus, policy-makers hoped that public housing residents would be able to mitigate long-term social exclusion persistent among this population. CSS' goals of continuing education, job training, job placement, and case management were mostly adult-focused. Although youth programs were always included in HOPE VI grant funding, few detailed goals and outcomes were set for the children and youth residing in HOPE VI units (Slingluff 2006). Likewise, youth development indicators, such as high school graduation rates or youth programming, are not a component of the mandated reporting by local housing authorities (McKoy, Kobler et al. 2005). Although there is growing understanding and appreciation of the importance of youth engagement in the community development process, youth needs and perspectives have been largely ignored and omitted from major redevelopment initiatives in most communities, including public housing (McKoy, Kobler et al. 2005). Nevertheless, considering the needs and viewpoints of youth adds

value to community revitalization efforts. Similarly, engaging youth in community revitalization efforts can play a powerful empowering role for these youth.



Evidence on the relationship between Youth-Serving Programs and Health

Children living in distressed public housing are vulnerable populations. Researchers have found that children living in distressed public housing must combat environmental hazards such as mold, rodents, and lead paint that negatively impact their overall physical health (Popkin, Eiseman et al. 2004). The asthma rate in HOPE VI children two to three times the national average, and results in missed days of school and increased hospital visits (Popkin, Katz et al. 2004). Also, symptoms of stress and anxiety are evident in many HOPE VI youth (Popkin, Katz et al. 2004). Many of the schools that HOPE VI children attend are also experiencing distress, and HOPE VI children report higher than average behavioral referrals and disciplinary action than other children, and often struggle academically in school (Popkin, Katz et al. 2004).

Health status later in life can be predicted by trajectories that are initiated early in life. Such trajectories can either protect health or increase vulnerability and are influenced by social contexts (Bures 2003) (*more in-depth information on the impacts of these social support networks can be found in the **Social Cohesion** Chapter*). Such contexts, such as residential stability and neighborhood effects, may increase children's individual and community-based

social capital—their connections to personal, social, and institutional networks—by giving them the opportunity to develop strong social and community ties (Bures 2003; Clampet-Lundquist 2007). Likewise, children’s connection to place can play a role in healthy development, as well as the meaning that children attach to their experiences (Sullivan and Lietz 2008). Understanding the concept of place attachment and the loss that HOPE VI youth might have experienced as their homes have been demolished and rebuilt will help support youth in maintaining a connection to their memories of place (Sullivan and Lietz 2008).

Public housing redevelopment has the potential to create physical spaces and new social services in which youth can develop stronger social and community ties. Specific health objectives for children, such as increasing physical activity may be facilitated by consideration of play areas, mixed land use, and environmental conditions that promote active modes of transportation. The promotion of healthy diets may also occur with fewer fast food and more supermarket grocery stores onsite in the neighborhood. On-site community centers can serve as physical focal point for youths’ skills and educational development (after school programs, leadership training, library, access to Internet, and music, dance, and computer classes, etc.). Having dedicated space and programming committed to children’s academically development during redevelopment may promote better education attainment, which has lasting health impacts, such as economic status in adulthood. On-site community centers can serve as a place to coordinate other positive health programs beyond those just focused on youth, including community gardening, food pantry, communal meals, sports activities, WIC, and tenant’s meeting spaces. Redevelopment could also result in the restructuring of physical spaces and programming to better serve the needs of not only public housing residents but also those of the surrounding community, which may promote improved social cohesion and poverty deconcentration at the larger neighborhood level.

Although our focus here is on on-site community centers, public housing youth may also benefit from programs and services offered in the surrounding community. To the extent that public housing youth do not feel socially excluded from other community centers, they can potentially benefit from the resources of their neighborhood.



They Mistook the Determination in Our Eyes for Hopelessness (Teruya 2002)

Existing Conditions and Assessment of Redevelopment Impact on Youth Programs and Services

To assess the impact of services programs on health, we conducted a literature review on HOPE VI public housing, youth engagement strategies, and community services, conducted 25 key informant interviews (20 with residents, 5 with other stakeholders), and asked various questions on a Health and Redevelopment survey to 150 residents. Although our initial intent of this section was to gain insight on youth-serving programs, due to human subjects considerations, our survey was administered to adults 18 years and over. Nevertheless, these adults were able to provide their perspective on both the youth- and adult-focused programming at the sites. Question we sought to answer included:

- *What services are offered at your site's Community Center or Teen Center?*
- *What services would residents like to have at the Center?*
- *What do residents get out of coming to the Community/Teen Center?*
- *Compared to before redevelopment, are programs and services are better or worse than before?*
- *Did redevelopment create any types of jobs for residents?*

Residents in Bernal Dwellings listed the following five on-site services that are most important to them: computer lab, food bank, homework assistance, job training, and advocacy/case management. At North Beach Place, the residents listed these five: food bank, Teen Center, computer lab, job training, and Community Room. These responses speak to the residents' value of developing personal and job skills, as well as the importance of the weekly free food banks at each site.

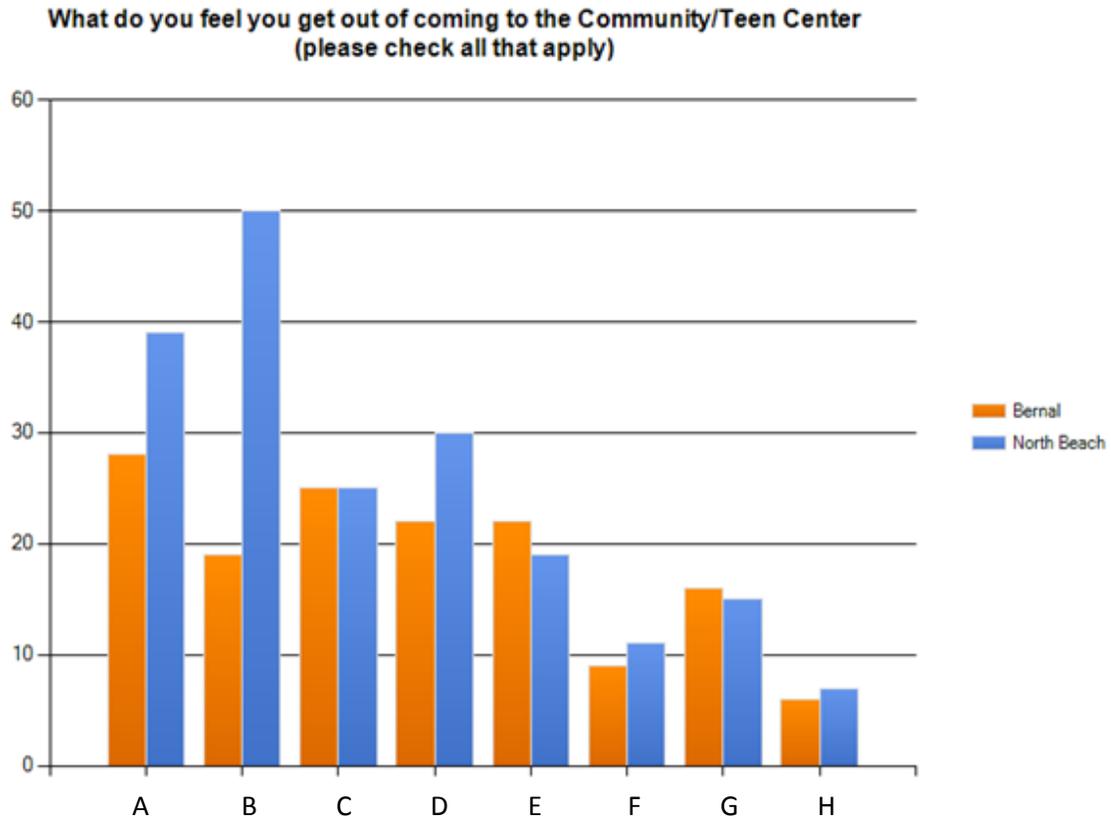
It is clear that one of the beneficial outcomes of redevelopment was the establishment of the Mission Neighborhood Community Center at Bernal Dwellings, specifically with Ginale Harris, who is a committed, hard-working advocate for the residents. Many residents stated that the most valuable things about the Center are its status as a safe, comfortable haven where no nonsense, crime, or *"b.s. and bad attitude"* is tolerated (*also see **Social Cohesion Chapter***). Particularly this aspect of the Center is of great value for youth: *"We need more community centers so the kids won't get into trouble. If there were more [centers], then maybe a lot of teens would still be alive."* Statements about "keeping the peace" and "safety" and an alternate place to be rather than the streets was echoed among interviewees. Lastly, there are community events, like parades, that they hear about through the center and like to attend. Most heartfelt were residents' comments that Ms. Harris had advocated for them with the management against eviction, had helped their son to get a job, had supported them in times of mental distress, and had helped them with the school district. The fact that Ms. Harris has gained a tremendous knowledge of the system in the time working at the Center which enables her to offer services navigating the system as well as championing residents in their trials is crucial to the well-being of many residents. Others talked about working or volunteering at the Center as a way to give back or to stay out of harm's way. People use the computers and internet at the Center, and have gotten job counseling and services through the Center.

Students get help with their homework and are able to concentrate on their studies. People like anger management resources, the food bank, the toy drive, and vacation planning/funding.

At North Beach Place, the Teen Center offers a variety of programs and services to the teens of North Beach place, including: computer, video game, and internet access, an afterschool homework program, various cooking, dancing, and multi-media classes, movie nights, birthday celebrations, and parties. According to one key informant who used the center when he was younger, "The Teen Center is...a good place to hang out rather than get in trouble outside." Another interviewee said, "If you're looking for a job, the teen center is a good place to go because you can use the internet and the computers there, and ask staff for help." However, several key informants felt the teen center was under-utilized. One key informant shared that this might be because it had the reputation of being a place where the "reckless" kids would go. She felt that there needed to be "more structure, rules, and discipline." Another key informant suggested that the center could be used to offer more activities to "get [teens] thinking and not merely just a place to hang out and get kids off the street."

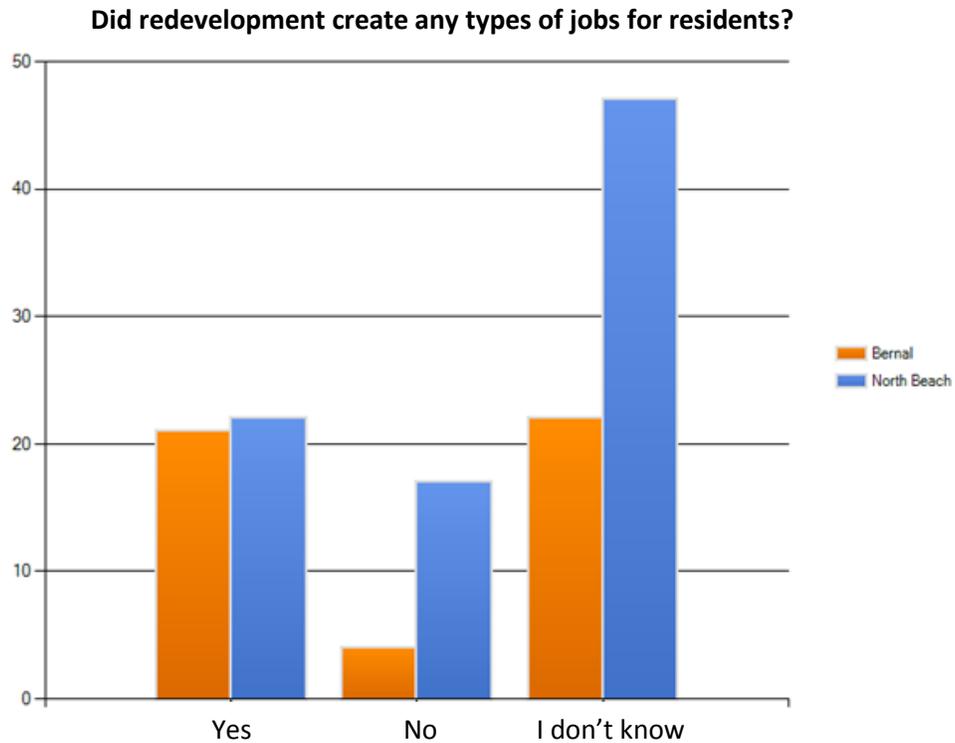
When asked about which services they would like to see at Bernal Dwelling, residents listed: food bank, job training, youth sports, college planning, and self-help services. North Beach place residents listed: Fitness classes/activities, more activities for teens, job training, English classes and also activities in more languages than just English, and services for seniors. Also, since the key informant interviews revealed that the outdoor common areas and play grounds are not very child-friendly (see **Healthy Eating/Active Living Section**), several interviewees expressed interest in having more activities for younger kids, not just teens. It is clear that in both sites more programming geared specifically for children and teens are sorely needed.

In addition to building their personal and professional skills, residents in both sites look for the Centers as places where they can enhance their social capital and sense of safety.

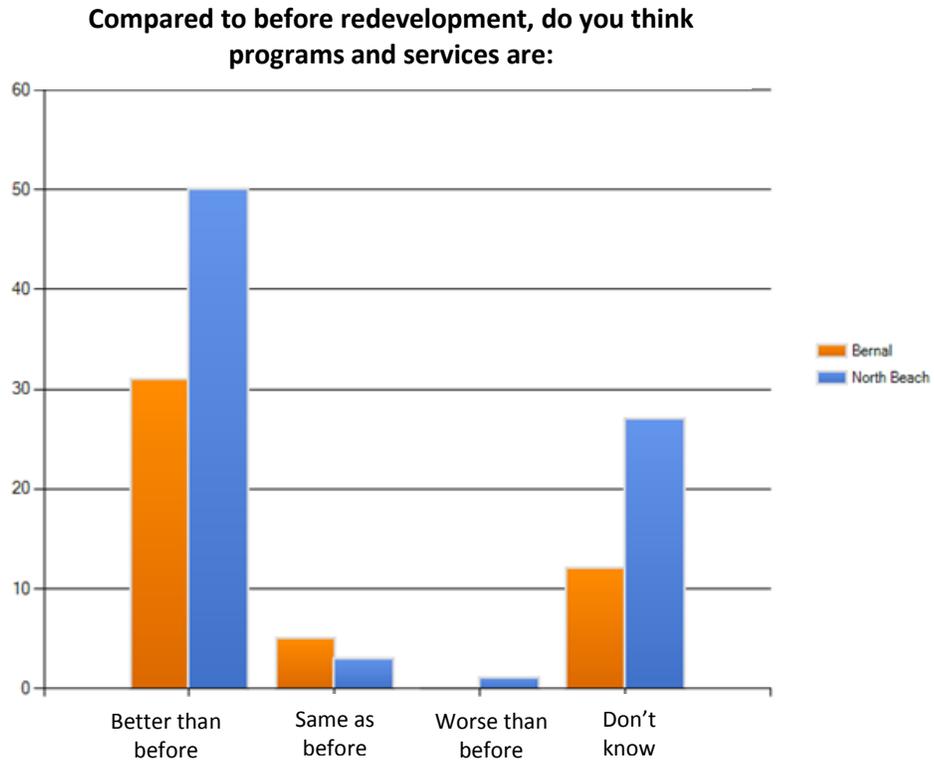


- A. Learn new skills and knowledge
- B. Make new friends
- C. Stay out of trouble
- D. Job training
- E. Job placement/referral
- F. Paid work experience
- G. Job counseling
- H. Other

However, the direct creation of jobs as a result of redevelopment is unclear. Most of the respondents who were not present before redevelopment, responded that they didn't know. However, of those that did know, generally more people responded that redevelopment did lead to jobs. This was especially the case for Bernal Dwellings respondents.



Overall, respondents felt that the on-site services are better since redevelopment because there are more organized services, more programming for teens, and safe environments.



Conclusions and Recommendations

On-site community centers exist at both HOPE VI sites, which offer a variety of programs and services to youth. The perception among residents is that redevelopment was associated with notable improvements in programs and services, and that the services could be enhanced. At both sites, the centers fulfill a need for social cohesion, and providing important services, such as the food bank, computer labs, job training, sports and fitness, afterschool education and college planning. Many felt that the Centers were important to keeping youth out of trouble, and offering a safe haven from crime.

The guiding principles for new HOPE SF redevelopment focus on rebuilding distressed public housing, while improving the quality of life of existing residents and the surrounding community. Yet, it is troubling that the principles do not include a commitment to social services and programming. There are only short-term objectives for job training and employment during the development process, and a mention of integrating development with neighborhood improvement. In fact, the guidance document suggests that independent funds will need to be secured for social services, outreach, job training, and school improvements. Yet, some of the HIA stakeholders say that substantial resources and planning exist for programs and services under HOPE SF.

Recommendations

HOPE VI sites

- Fully implement, fund, and staff Community and Supportive Services (CSS)
 - Such services should be driven by the needs of the resident population at each HOPE VI site. For example, if there is a large population of elderly or disabled residents, the site should consider an on-site health care facility, or if there are a large number of children under age 5, an on-site day care facility would be appropriate.
- Hire case managers/advocates and support opportunities to foster their continuing professional development
- Extend the Hours of the Community/Teen Center to include evening and weekend hours
- Develop relationships with local schools and youth development agencies to recruit teens and support on-site youth programming
- Work with local schools to create community-based/out-of-schooltime interventions for enhancing academic performance
- Maximize opportunities to foster cross-cultural relationships through the Community/Teen Center
- Assess the feasibility of establishing a permanent food pantry or other food subsidy program

- Programs and services should be routinely monitored and reassessed to address changing resident population needs, and to gauge measures of success (e.g., participation in programs and services, school achievement, employment).

HOPE SF

- The HOPE VI recommendations apply equally to new HOPE SF sites.
- Secure funding for a variety of cultural, educational, job, social support services for all ages at HOPE SF sites.
- Programs and services should be an integral component of redevelopment that could benefit from a participatory planning process to ensure that each HOPE SF site has adequate space, access, staffing, and other resources needed for future programs and services.
- Maintain artifacts from the original site, such as bricks, doorknobs, pictures, or videos, in order to support residents' sense of place memory and place attachment

References

- Bures, R. M. (2003). "Childhood Residential Stability and Health at Midlife." American Journal of Public Health **93**(7): 1144-1148.
- Clampet-Lundquist, S. (2007). "No More 'Bois Ball: The Effect of Relocation From Public Housing Adolescents." Journal of Adolescent Research **22**(3): 298-323.
- HOPE SF: REBUILDING PUBLIC HOUSING AND RESTORING OPPORTUNITY FOR ITS RESIDENTS
Summary of Task Force Recommendations to the Mayor and Board of Supervisors
March 23, 2007
- McKoy, D., A. Kobler, et al. (2005). The HOPE VI Leadership for Change Initiative. Berkeley, The Center for Cities & Schools.
- Popkin, S. J., M. Eiseman, et al. (2004). How Are HOPE VI Families Faring? Children, The Urban Institute.
- Popkin, S. J., B. Katz, et al. (2004). A Decade of HOPE VI: Research Findings and Policy Challenges, The Urban Institute.
- Slingluff, S. (2006). Evaluation of the Mandela Gateway HOPE VI Redevelopment. Berkeley, The Centers for Cities & Schools.
- Sullivan, A. L. and C. A. Lietz (2008). "Benefits and Risks for Public Housing Adolescents Experiencing Hope VI Revitalization: A Qualitative Study." Journal of Poverty **12**(2): 133-154.
- Teruya, W. (2002). They Mistook the Hopeless in Our Eyes for Hopelessness. Los Angeles, Self-Help Graphics.

Healthy Eating and Active Living

Questions for HIA

- Why are healthy eating and active living important promoters of good health?
- What neighborhood-level factors influence healthy eating and active living?
- In what ways may public housing residents be vulnerable to having poor diet and physical activity?
- How did public housing redevelopment impact healthy eating and active living?

Background

Regular physical activity and a nutritious, balanced diet have been shown to have a myriad of both physical and mental health benefits (Office of the Surgeon General, 1996, 2001). Poor nutrition and physical inactivity are more prevalent among residents living in neighborhoods of low socioeconomic status (SES), where public housing developments are often located (Moreland et al., 2002, Heinrich et al., 2007). These neighborhoods disproportionately suffer from environmental factors such as the lack of safe, well-maintained places to be physically active, low perceived safety of the neighborhood, fewer grocery stores, and higher density of fast food, alcohol, and tobacco outlets (Babey et al., 2007, Bennett et al., 2007, Beaulac et al., 2009, Babey et al., 2008). Thus, healthy eating and active living (HEAL) interventions that focus on improving the neighborhood environment may be of particular benefit to residents of public housing.

Through altering land-use patterns and providing incentives to draw needed resources into the community, public housing redevelopment can reshape communities to facilitate access to healthy food and increase opportunities for physical activity.

Evidence on the Relationship Between Physical Activity and Active Living on Health

Healthy eating and regular physical activity reduces the risk of premature mortality, cardiovascular disease, hypertension, type 2 diabetes, osteoporosis, obesity, and certain cancers (Office of the Surgeon General, 2001). Physical activity in particular can also prevent or reduce the severity of certain mental health problems such as depression, stress, anxiety, and negative self-concept (Fox, 1999). Consumption of a high quality diet and better physical fitness are each associated with better academic performance in children, which in itself is a factor that predicts better health outcomes later in life (Florence et al., 2008, Ortega et al., 2008).

The 2001 Surgeon General's report on preventing overweight and obesity found that nearly one-third of Americans fail to meet the recommended 30 minutes of moderate physical activity at least five days a week. Forty percent of American adults do not engage in leisure-time

physical activity at all. Only 3 percent of all Americans meet at least four of the five federal Food Guide Pyramid recommendations (Office of the Surgeon General, 2001).

As health professionals strive to develop interventions to improve HEAL, the impact of the environment on shaping health behaviors is receiving increasing attention. For example, factors such as how far and how much effort it will take to bring groceries home (e.g., whether there is a supermarket close by, if elevators are located close to apartments, the amount of stairs one must climb, how far one must walk) impact an individual's ability and choice to eat healthily. Similarly, other neighborhood factors such as the presence or absence of sidewalks, walking trails, parks; convenient public transit; and the density of fast food restaurants and liquor stores can also greatly influence eating and activity behaviors.

In particular, residents of low-SES neighborhoods are less likely to meet the Surgeon General's standards (Larson, et al., 2009, Babey et al., 2008). Lower-SES neighborhoods tend to have fewer environmental supports compared to higher-SES neighborhoods. Further exacerbating this problem is that low SES residents may not have additional resources (e.g. cars, money) to out-manuever the surrounding environment. For example, proximity to full-scale grocery stores can greatly facilitate healthy eating (Morland et al., 2002). Lower-SES neighborhoods have fewer grocery stores and more fast food restaurants and corner stores than higher-SES neighborhoods, a factor associated with higher obesity rates regardless of household income, race/ethnicity, age, gender, or physical activity levels (Babey et al., 2008). Fresh produce and other healthy foods tend cost more at neighborhood bodegas and corner markets than in full-scale supermarkets (Moreland et al., 2002). Thus, not only are healthy foods less available in low-SES areas, they also tend to be more expensive. Cost is likely to be a large obstacle for residents of low-income and public housing. Together, cost and accessibility are two related barriers to healthy eating that disproportionately affect low-income residents living in public housing.

Residents of lower SES neighborhoods also tend to have fewer opportunities for physical activity (Babey et al., 2008). Socioeconomic status is positively and linearly correlated with the mean percentages of students who were required to take physical education and who actually take physical education, as well as estimated percentages of male and female students' participation in sports (Johnston et al., 2007). Further contributing to low levels of physical activity among low-income youth may be concerns around community violence and unintentional injury (see **Crime and Safety** chapter). Residents who feel unsafe in their community are less likely to participate in leisure-time physical activity. In neighborhoods that are perceived as less safe, residents tend to walk less, use parks and green space less, and toddlers tend to watch more TV (Bennett et al., 2007, Burdette and Whitaker, 2005). In communities where there have been a lot of traffic accidents, or absent/poorly maintained sidewalks, lighting, or playgrounds, parents and families generally do not walk to school, work, or to run errands (Pollack, 2009).

Increasing Opportunities for Healthy Eating and Active Living

Public housing redevelopment provides an opportunity to reshape distressed communities and facilitate access to healthy food and increase opportunities for physical activity. For example, to increase healthy eating, public housing redevelopment can put in retail centers and provide incentives to draw in grocery stores, produce vendors, farmer's markets, or full-scale supermarkets. Additionally, redevelopment plans can include community gardens, community kitchens and other communal spaces for on-site services such as a food pantry or the federal Women Infants and Children (WIC) supplemental nutrition program classes. Retail centers and mixed income housing can also provide a tax base for programming and services that promote healthy eating and activity, such as cooking classes, exercise classes, and dance classes.

Further, public housing redevelopment plans that focus on creating walkable and bike friendly environments can greatly increase resident's daily physical activity. Residents of communities that are conducive to physical activity (e.g. mixed-land use, walkable, and bikeable) are more likely to participate in leisure and transportation-related physical activity (Aytur et al., 2007). Another intervention to increase physical activity could be to work with public transit to alter the bus route or build near a bus route. A study found that residents who live in densely populated areas near public transportation and mixed-use developments have lower body mass index (BMI) scores than other residents of the same city (Rundle et al., 2007). Proximity and convenience of public transit contributes to walking between transit stops, which may be particularly salient to public housing residents since they are less likely to own cars.

Redevelopment can also create space for playgrounds, courts/facilities for recreational sports, and other green space, such as community gardens, in the complex. The availability of quality facilities for physical activity or safe paths for walking has been shown to have a greater impact on physical activity for residents of lower SES than residents of higher SES communities (Wilson et al., 2004). Trails or walking paths, for example, provide a low-cost way to walk, which is the most common form of physical activity for some racial and ethnic groups (Simpson et al., 2003).

Lastly, land use and design decisions can also play a part in decreasing community violence and increasing a sense of perceived safety (see **Crime and Safety** chapter). Community interventions that increase safety and reduce disorder, including programming and services in addition to physical improvements (e.g., sidewalks, street lighting, parks, and beautification), may lead to increased physical activity, thereby reducing risk of overweight and cardiovascular disease (Molnar et al., 2004, CDC, 2005).

Standards

- I. The Surgeon General, in recognition of the large impact overweight and obesity has on children's health, has committed to encourage Americans to:
 - Help Kids Stay Active;
 - Encourage Healthy Eating Habits; and

- Promote Healthy Choices (Office of the Surgeon General, 2001).
- II. *Healthy People 2010* identified overweight and obesity as 1 of 10 leading health indicators and called for a reduction in the proportion of children and adolescents who are overweight or obese (US DHHS, 2000).
- Objective 22-2 - Increase the number of adults who engage in regular, preferably daily, in moderate physical activity for 30 minutes per day.
 - Objective 22-14 - Increase the proportion of trips made by walking.
 - Objective 22-15 - Increase the proportion of trips made by bicycling.
- III. In California, transportation professionals have been working towards decreasing auto dependence and increasing walkability and bikeability throughout the state. The 2003 *Governors Environmental Goals and Policy Report* supports:
- Encouraging a balance between job and housing development, at the regional, sub-regional, and community level to reduce the negative impacts of long commutes and automobile dependency.
 - Providing the public with a transportation network that increases mobility choices—including public transportation, walking, and biking—and allows equitable access to jobs, community services and amenities.
 - Promoting compact, higher density residential development patterns to maintain and enhance agricultural and natural resources (OPR, 2003).
- IV. The Governor’s Vision for a Healthier California listed 10 priorities to improve healthy eating and active living, including:
- Produce and other fresh, healthy food items will be affordable and available in all neighborhoods.
 - Neighborhoods, communities and buildings will support physical activity, including safe walking, stair climbing, and bicycling.
 - Healthy foods and beverages will be accessible, affordable, and promoted in grocery stores, restaurants, and entertainment venues (CA Health and Human Services Agency, 2005).
- V. San Francisco has the following standards
- The SF General Plan Recreation and Open Space Element (ROSE) states parks should be within walking distance of a home, and that a neighborhood has adequate access to open space if it is within one-half mile of city wide open space, three-tenths of a mile of district open space, one-quarter mile of neighborhood open space or one-eighth mile of subneighborhood open space. http://www.sfgov.org/site/planning_index.asp?id=41414
 - The San Francisco Sustainability Plan states that SF people, especially those with low income, lack food security, that access to nutritious and affordable food is a principal sustainability goal, and that neighborhood-level food services should be available. <http://www.sustainable-city.org/Plan/Food/intro.htm>

Existing Conditions and Assessment of Redevelopment Impact on Healthy Eating and Active Living

Below, we summarize our findings from our literature review, key informant interviews, and Health and Redevelopment survey.

Prevalence of Obesity and Diabetes

The UCLA Center for Health Policy Research, based on 2005 California Health Interview Survey data, estimated that the prevalence of obesity and diabetes in San Francisco is 14.8% and 5.7%, respectively (Babey et al., 2008). California rates of obesity and diabetes are 21.2% and 6.8%, respectively. San Francisco ranked 3rd lowest prevalence of obesity and 9th lowest prevalence of diabetes among the largest 25 counties in California. This data is for all of San Francisco and not broken down by neighborhood so it is difficult to ascertain the actual prevalence rates of obesity and diabetes in the North Beach Place and Bernal Dwellings neighborhoods. Based on our survey data, 14% and 20% of North Beach Place and Bernal Dwellings respondents reported that they were overweight or obese, and 13% and 10% reported that they had diabetes, respectively.

Food Retail and Availability

Accessible and affordable healthy food retail is of great importance, particularly for teens. A 2005 study found that more California teens consume soda and fast food each day than five servings of fruits and vegetables (Hastert et al., 2005). As noted earlier, the highest rates of obesity, regardless of household income, race/ethnicity, age, gender, or physical activity levels, are in lower-SES neighborhoods with fewer grocery stores and more fast food restaurants and corner stores (Babey et al., 2007). A recent study found that San Francisco had the 13th highest proportion of fast-food restaurants and convenience stores compared to grocery stores and produce vendors among the largest 25 counties in California (Babey et al., 2007). Although the research team did not collect data on the actual number of fast food outlets and grocery stores; however, resident behaviors with regards to *fast food restaurant patronage* (figure 1), *home-cooked meals consumed* (figure 2), *where residents get their fresh produce* (figure 3), *impressions of those outlets* (key informant comments), and *how often they tend to eat fresh fruits and vegetables* (figure 4) are indicators of risk.

At both sites, healthy eating seems to be positively affected by the presence of the community kitchen and weekly on-site food pantry. By building dedicated space to allow for these activities, redevelopment increased resident's access to fresh, free produce. Further, houses are now two or three-levels instead of high-rises, which may make it easier for people to carry groceries back to their houses.

A key benefit to the redevelopment at North Beach Place was the co-location of an on-site supermarket. This aspect of the redevelopment plan would probably have benefited Bernal Dwellings, where residents reported dissatisfaction with their local grocery options. Bernal is in

a more residential area than North Beach, however is still within walking distance to many small markets in the neighborhood.

From our survey we found that residents of Bernal Dwellings were more likely than residents of North Beach to frequent fast-food restaurants during the week and less likely to eat at home (figures 1-2). The residents at both sites tended to use the supermarket and food pantry more frequently than other venues to get fresh fruits and vegetables (figure 3); however, according to the key informants, the quality and accessibility of grocery store locations differed. The key informants from Bernal Dwellings stated that though there are adequate numbers of grocery options in the neighborhood, the quality of those outlets is not necessarily the best, and can be costly. In contrast, key informants at North Beach reported multiple ways to access affordable, fresh produce nearby. These perceptions could affect how often fruits and vegetables are being consumed: residents at both sites said that they often consumed fruits and vegetables, but North Beach had a higher percentage (figure 4). The GIS mapping data shows Bernal Dwellings is located in an area that has a lower mean income than the area surrounding North Beach Place (see **Neighborhood Conditions** Chapter). These factors combined suggest residents at Bernal Dwellings may be at higher risk for obesity and diabetes due to the dietary behavior and environment.

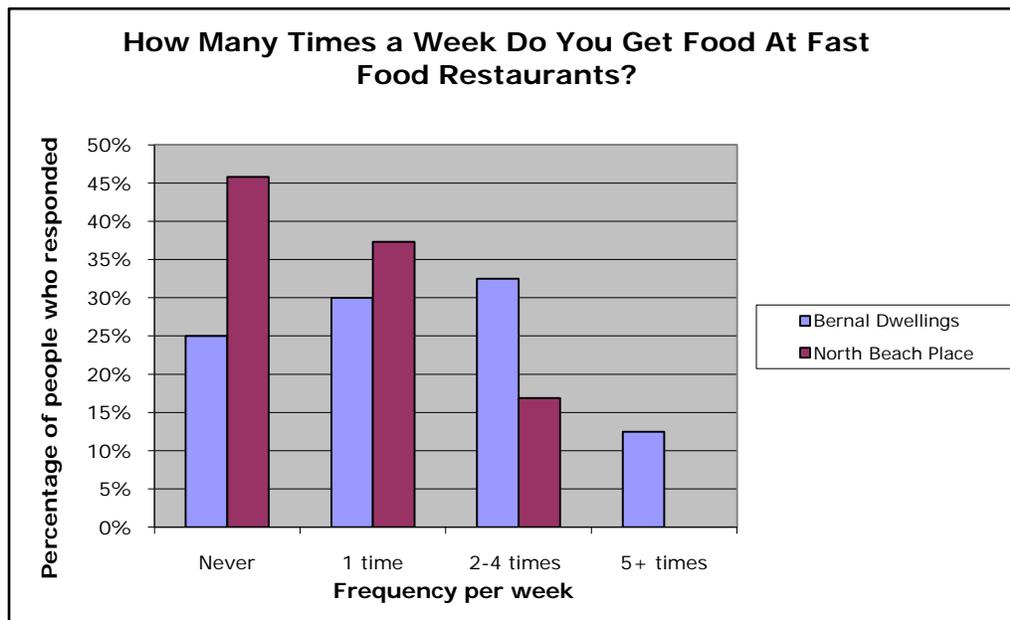


Figure 1. Fast Food Restaurant Patronage.

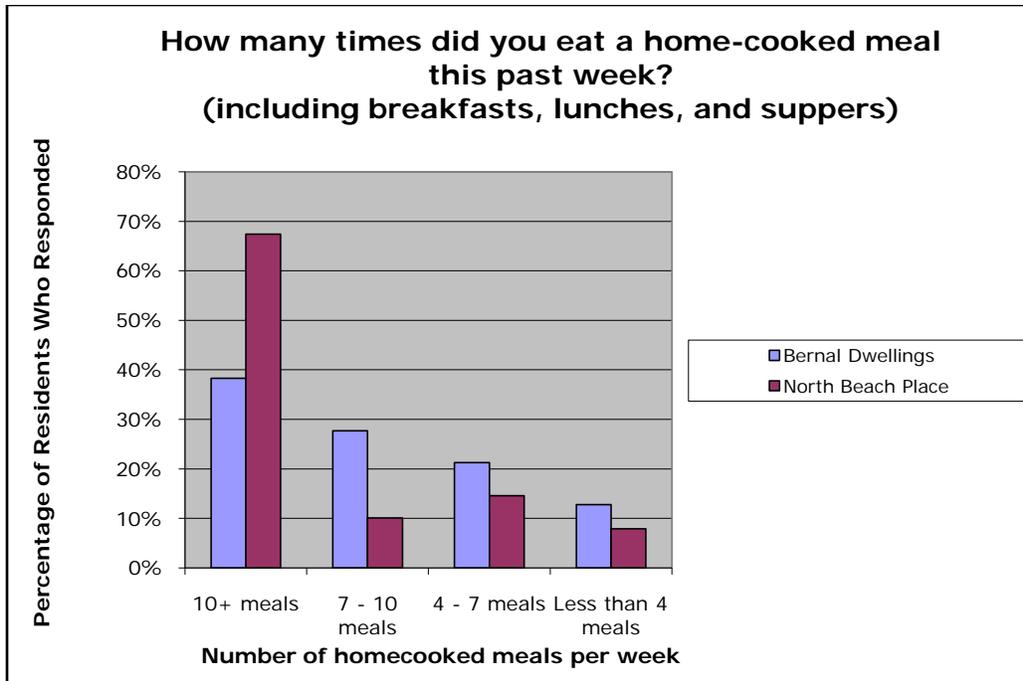


Figure 2. Consumption of Home-Cooked Meals

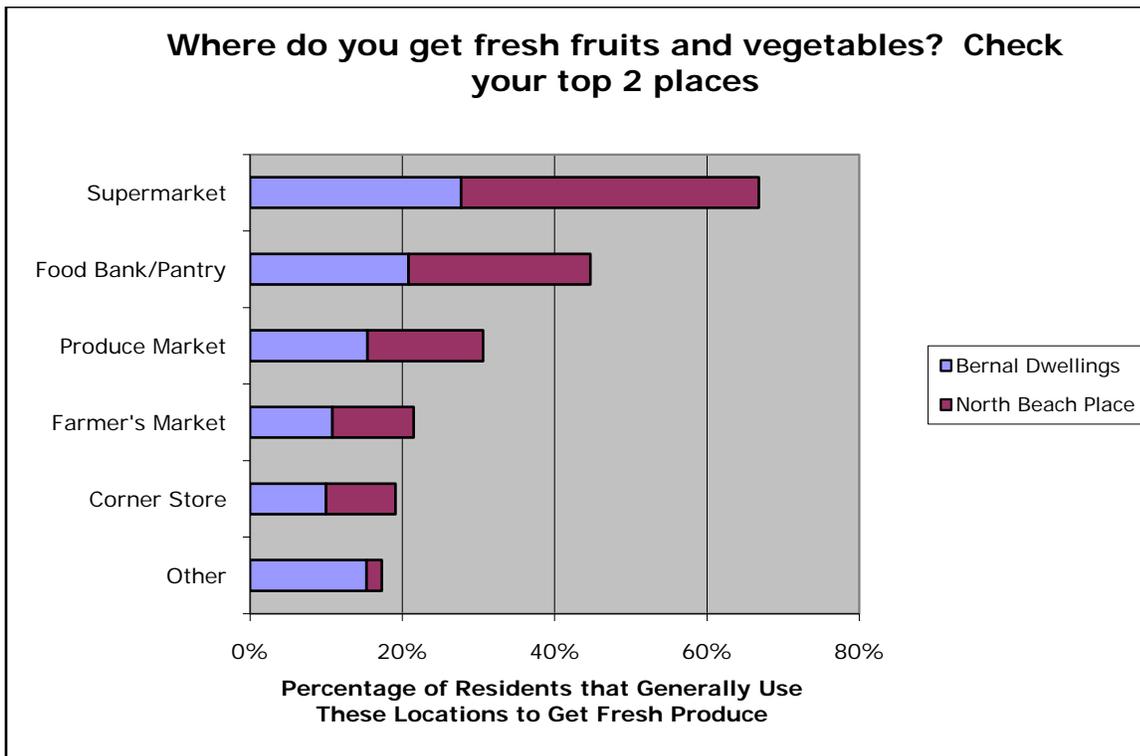


Figure 3. Popular Locations to Obtain Fresh Produce

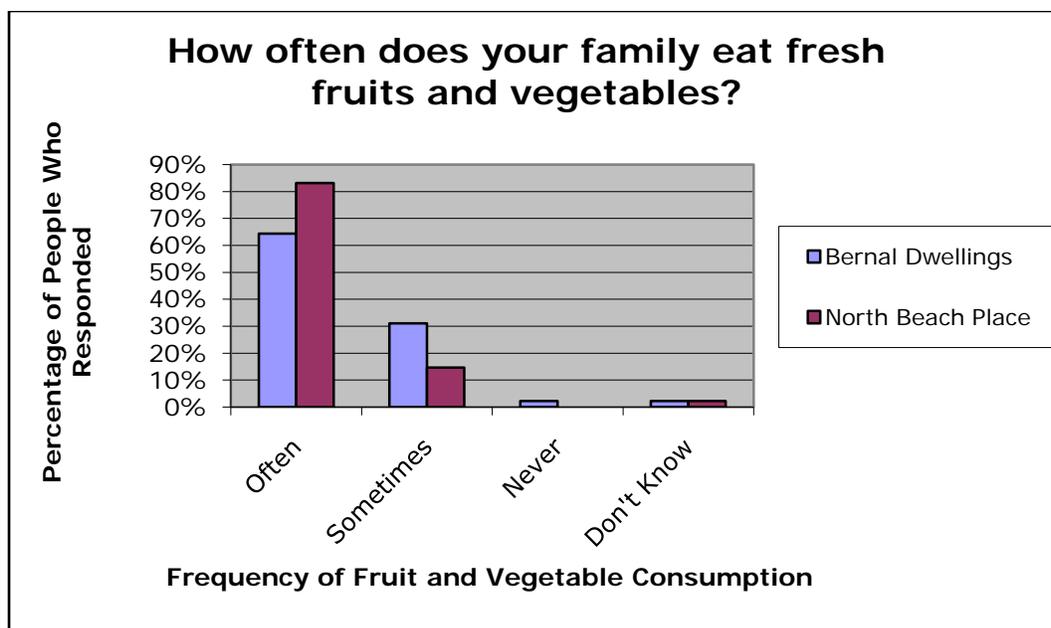


Figure 4. Fruit and Vegetable Consumption

Walkability, Bikeability, and Accessibility of Public Transit

Walking is most common form of exercise, particularly among certain ethnic and minority groups (Simpson et al., 2003). The Internet site *WalkScore* uses GoogleMaps technology to assign a walkability score to neighborhoods based on the number of resources (e.g. grocery stores, schools, parks, retail) within walking distance from a particular street address (WalkScore, 2009). North Beach Place received a walk score of 94/100, a so-called “Walker’s Paradise.” This title is conferred on neighborhoods where “most errands can be accomplished on foot and many people get by without owning a car.” Bernal Dwellings scored an 88/100, which earned it the title “Very Walkable” defined as “It’s possible to get by without owning a car.” At North Beach, key informants reported that the large quantity of attractive destinations (parks, playgrounds, pier, coffee shops) as well as important resources (grocery store, food pantry, schools, jobs) within walking distance or easily accessible by public transportation encouraged people to walk. *“Living here is more convenient – you are in walking distance to things to see, to Safeway. You don’t need MUNI.”*

More survey respondents at North Beach felt that it was easier to get around after redevelopment (Figure 5). This may be due, in part to the fact that several retail stores were built on-site, including a Trader Joe’s and a Starbucks. Additionally, North Beach is in a more touristy area and Bernal Dwellings is in a more residential area.

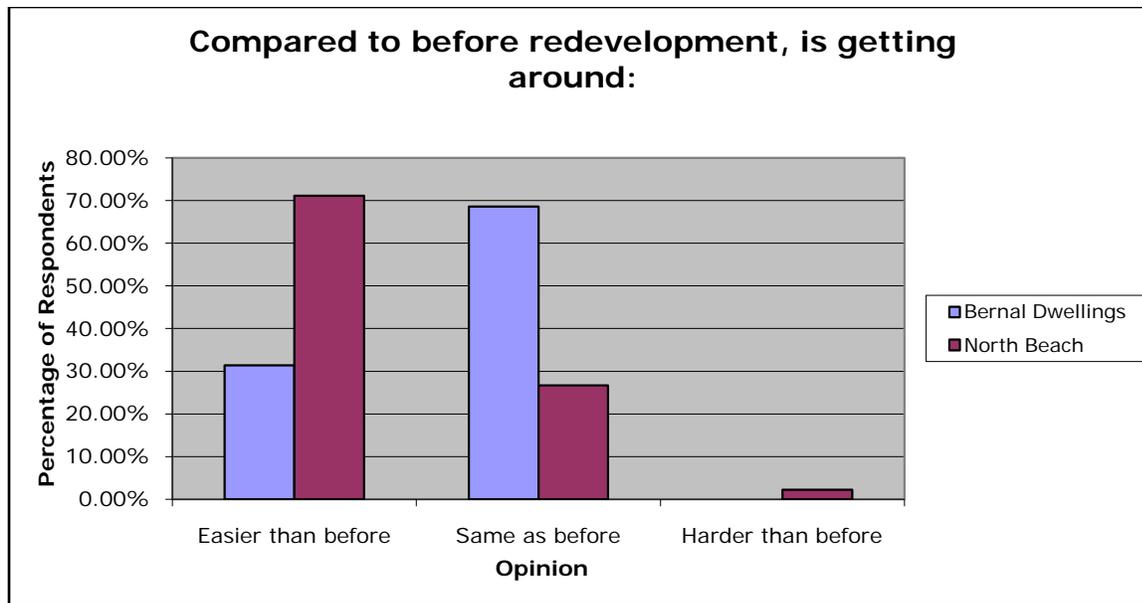


Figure 5. Perceived changes in access before and after redevelopment

WalkScore does not take into account public transportation, which, as noted before, can promote walking between transit stops. North Beach key informants repeatedly spoke of the access to high quality and convenient transportation. Bernal Dwellings key informants did not specifically mention public transit except for one mother who expressed concern that the rising prices would put a strain on her already limited budget; however, Bernal Dwellings is located a few blocks from BART and there are several MUNI lines that run that nearby.

According data obtained from San Francisco Public Health Department's Healthy Development Measurement Tool, more people chose to commute by walking near North Beach Place compared to Bernal Dwellings. If the destination was within the 1 mile of the housing complex, there is nearly double the percentage of commute trips made by walking occurring at North Beach Place than at Bernal Dwellings (see **Neighborhood Conditions** chapter). This is consistent with previous research that has shown that young people are more likely to walk if they live within a half-mile of a park or a store (Frank et al., 2007). There was a slightly higher percentage of commute trips made by biking around Bernal Dwellings compared North Beach Place, though the difference is small. This could be explained by the fact that there is a slightly higher percentage of bike network mileage surrounding Bernal Dwellings compared to North Beach Place (See **Neighborhood Conditions** chapter).

Perception of Safety

Residents' perceptions of neighborhood safety can affect their willingness to engage in regular physical activity by discouraging activities such as walking, utilizing parks and playgrounds, or playing outside (see **Crime and Safety** chapter). Both the key informant interviews and surveys showed remarkably different perceptions of safety at North Beach Place and Bernal Dwellings.

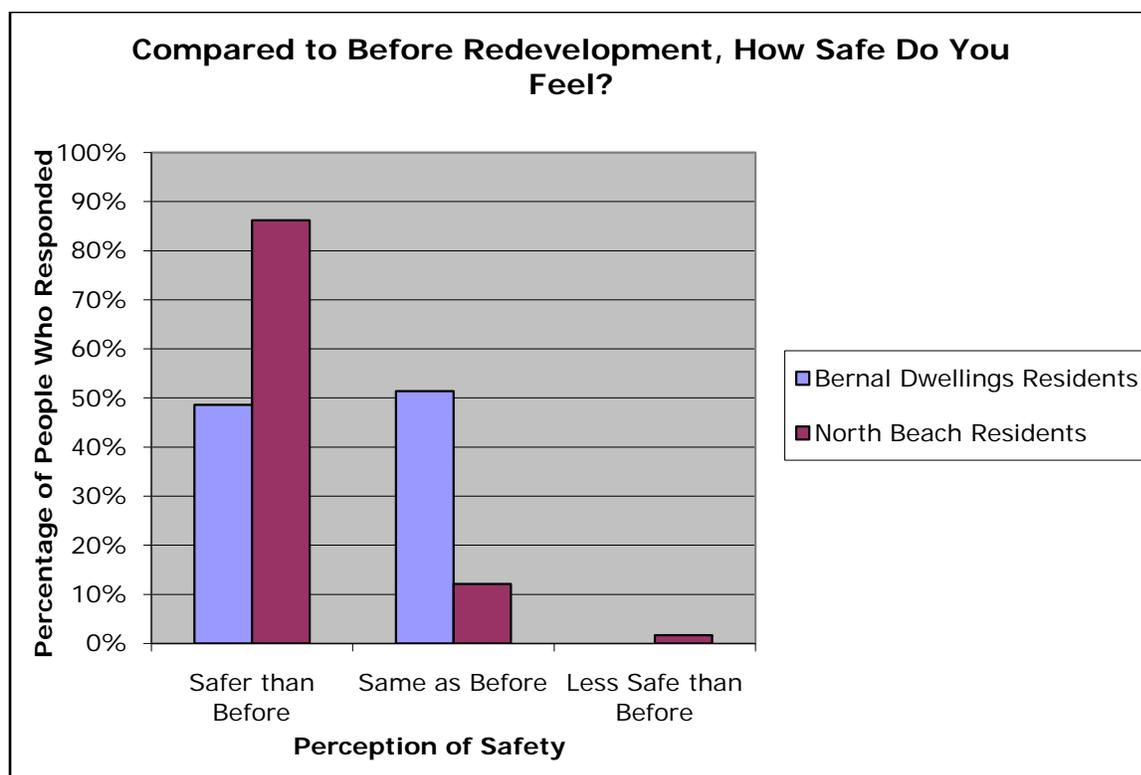


Figure 6. Perceptions of Neighborhood Safety Before and After Redevelopment

At North Beach Place, multiple interviewees reported that they felt safer than where they previously lived. Further, some parents noted that because of the increased sense of safety, they would allow their children to walk to and from work and school by themselves. Additionally, not only did key informants who had moved from other housing projects feel that North Beach Place was safer, the survey also showed that the majority of residents felt the complex is safer now after redevelopment (figure 6). The reasons for this increase in perceptions of safety are unclear, but interviews suggested that the change could have resulted from 1) *A shift in the demographics* – “troublemakers” were not allowed to come back after redevelopment; 2) *Strict enforcement of the rules*, in particular around congregating or suspected gang activity; 3) *The pride people take in their homes* and not wanting to lose them; 4) *The gated community* – children can be out alone and will only be surrounded by neighbors. These suggestions have not been validated by the data, but are general impressions from key informants interviews (see **Crime and Safety** Chapter). Further, although there may have been an increase in safety, other issues, particularly around social cohesion, may have been negatively affected (see **Social Cohesion** Chapter).

At Bernal Dwellings, the results from the survey (figure 6) show that about half of survey respondents felt the level safety remained the same after redevelopment and the other half felt that safety had improved. Key informant interviews, however, underscored community violence as a pervasive issue. Although there is a park across the street, one of the interviewed residents said that she felt the park was unsafe due to gang recruitment, police harassment,

and day laborer loitering. Her children play in the streets in front of the house, but she is often worried that the cars that drive through the complex might injure her children unintentionally. *“They play right in the middle of the project, where cars drive and don’t stop at signs.”* The lack of safe places to play may negatively impact children’s health. Researchers found that toddlers whose parents rated their neighborhoods as unsafe watched significantly more TV than their counterparts who lived in a neighborhood perceived as more safe, increments of inactivity which over time could add up to significantly less physical activity and increased BMI as children grow older (Burdette and Whitaker, 2005).

Parks, Open Space, and Recreational Facilities

People who live near outdoor parks are more likely to be physically active than those who do not live near outdoor recreation areas (Cohen et al., 2006). In particular, parks that provide structured programming, such as walking groups or sports teams, attract more users than other parks. Roughly half of residents at both sites used parks and other recreational facilities at least once a week. A third of Bernal residents and a little over 40% of North Beach Place residents surveyed went less than once a month (Figure 7) (Also see **Youth Programs and Services** Chapter)

In Bernal Dwellings, the public park across the street was also redeveloped at the same time, but designed with amenities for small children. Further, the recreation center at the park, which used to lend out balls and other sports equipment, has since closed and remains unutilized. There are courts nearby, but are often in use by other groups. The Bernal Dwellings Family Resource Center offers some dance classes and other activities, but beyond the Bernal Dwellings Family Resource Center, there are no fitness opportunities for teens (e.g. basketball courts with hoops and lights for evening activities) or adults (e.g. weightlifting). Additionally, gang activity, police harassment, day labor loitering, drug trafficking are also deterrents for residents using the park.

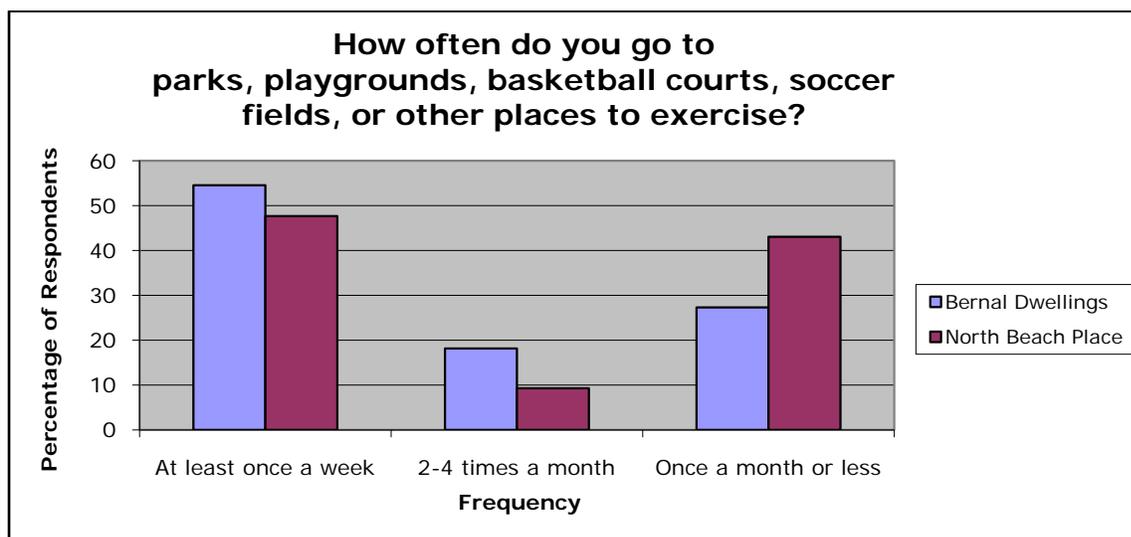


Figure 6. Frequency of Trips to Parks and Other Recreational Facilities

At both Bernal Dwellings and North Beach Place, the main reasons cited for not using the parks and sports fields were *lack of time* (BD – 44% of respondents; NBP – 37%) and *lack of interest* (BD – 22%; NBP – 17%). At Bernal, the 3rd – 6th most cited reasons for why people did not use the parks were: Playing fields always in use by others, Safety, Distance, and Programming, respectively. At North Beach, the 3rd – 6th most cited reasons people did not use the parks were: Programming, Distance, Playing fields in use, and Safety. This suggests that although frequency of use is similar for both sites, strategies for increasing residents' use of parks and other places to exercise differ between sites.

The survey focused on access to parks and recreational facilities; however, the key informant interviews brought an interesting issue to light. At both sites, but particularly North Beach Place, there are few places for active play. Both developments have on-site playgrounds that are for day care center-use only, and are not open to residents of public housing.

Residents of Bernal requested specific amenities during the redevelopment planning process that may have promoted physical activity. For example, residents requested basketball courts and a play area accessible to all residents directly in the housing complex. These elements were not incorporated in the new design. Additionally, residents requested a gated community, similar to North Beach. However, due to police concerns, Bernal did not become a gated community. Two-way streets cut between the houses, creating worry about children playing in front of the house.

At North Beach Place, there are signs around the complex that state “No Bicycles, No Skateboards.” There is a strictly enforced quiet after 10pm; several teens mentioned this rule as one of the reasons they play inside. Residents whose children are caught breaking the rules can be written up and cited. Thus, residents need to leave the complex to find opportunities for physical activity. This encourages interaction with surrounding community members, but also sometimes teens can get into fights with other teens at the other parks. There are not a lot of places to “be a kid.” The rules discourage physical activity in the complex, other than walking. On the positive side, residents seem more integrated into the community, and there are a lot of activity centers nearby.

Residents commented that with the many rules and restrictions, it is almost as if “*they are not built with kids in mind.*” There are parks nearby, but “*If teens go to the park, they get into altercations with other kids in the neighborhood and get kicked out.*” Thus, the teen center, which offers dance classes and other activities, becomes a valuable place where younger residents can be physically active (see **Youth Programs and Services** chapter). The teen center maintains a strict 12 years old and up policy and the residents strongly expressed a desire for more resources for children under 12 and extended hours of operation. Beyond walking, and using the stairs, residents generally tended to look to the surrounding neighborhood for opportunities to be physically active (e.g. nearby but off-site basketball courts, swimming pool, and gyms with both paid and free access).

Conclusions and Recommendations

Bernal Dwellings and North Beach Place differ with respect to how decisions were made regarding the layout, policies, and mixed-use. Despite these differences we found that with regards to healthy eating, both sites benefited from dedicated spaces for on-site healthy eating, including the community kitchen and food pantry. The food pantry is a very important source of food for low income residents, but not a permanent/sustainable source of food, especially for higher income residents. With regards to physical activity, both sites had convenient public transit many resources nearby, which encourages walking. However, both sites had limited access to physical activity spaces for active play.

North Beach Place added retail, grocery stores, and mixed use into the redevelopment plan, which facilitated residents in healthy eating and active living. A large drawback, however, is that the rules may be too strict around active play in the complex and housing management could work with residents to relax the rules around this area.

Bernal Dwellings' family resource center is used by the all ages and provides a variety of resources onsite. As this project was ending, they had just received a healthy afternoon snack grant, which will help them provide healthy snacks to all every afternoon. There is a redeveloped park across the street, which could be better utilized.

Differences in the surrounding neighborhoods may also influences HEAL. We found that Bernal Dwelling residents were more likely to eat fast food, while North Beach Place residents at more fresh fruits and vegetables, which seems to be associated with proximity and availability of affordable produce. We found that factors such as fear of gang activity, police harassment, day labor loitering, drug trafficking may act as barriers to physical activity. Some residents do try to use physical activity amenities in the neighborhood, which might have both positive (e.g., if public housing and surrounding neighborhood residents exercise together) and negative (e.g., if public housing and surrounding neighborhood residents compete for physical activity resources) impacts on social cohesion.

New HOPE SF redevelopment principles include aims which can indirectly improve healthy eating and active living. In particular, aims to improve parks, schools, transportation, public safety, and economic development are all opportunities for providing public housing residents and the surrounding community with more nutritious diets and improved physical activity. Through the participatory process of HOPE SF redevelopment, residents, SF Housing Authority, and the Mayor's Office of Housing should explicitly acknowledge healthy objectives in meeting the aims of the redevelopment principles.

*Recommendations*Bernal Dwellings

The City can:

- Provide funding so center can offer healthy eating active living programming.
- Work with park and recreation to reopen recreation center across the street.
- Provide lighting for the park across the street.
- Obtain permits or understanding to block off streets during certain points of time during the weekend so cars are unable to drive through and children and youth can use streets to be active/organize sports (e.g., leverage the success of neighborhood-level physical activity and nutrition prevention and environmental strategies in Shape Up SF program: <http://www.sfgov3.org/index.aspx?page=1129>)

The Center and Management can:

- Offer programmed activities with adult supervision at the park across the street.
- Implement a joint use agreement for the playground within Bernal Dwellings
- Investigate the feasibility of creating a “pocket park” within the public housing development.
- Work with law enforcement to promote walking safety.
- Work with the swimming pool officials to bypass online registration or set up times for people to come to center and use computers to register for swimming pool.

Residents can:

- Start a walking group.
- Advocate to get recreation center open across the street.
- Volunteers to monitor children using the playground.
- Advocate for discount transit passes
- Consider a community garden. Not only does this slightly increase access to fresh fruits and veggies as well as green space, but it may also have an impact on physical activity (gardening) and social cohesion (working with neighbors).

North Beach Place

The Center and Management can:

- Provide programming and services for children under 12.
- Implement joint-use agreement with day care to unlock the park.

Residents and Management can:

- Begin a structured conversation around playing ball/riding bicycles/skating with management or explore options for active play in the complex.
- Begin a structure conversation around how to appropriately deal with residents' whose

children or guest have broken the rules rather than writing them up a citation for someone else's behavior.

- Advocate for discount transit passes
- Consider a community garden. Not only does this slightly increase access to fresh fruits and veggies as well as green space, but it may also have an impact on physical activity (gardening) and social cohesion (working with neighbors).

Future HOPE SF redevelopment sites

In addition to consideration of the above recommendations, also consider:

- Continue to build dedicated space for programming and services related to healthy eating and active living (i.e. community kitchens, space for the food pantry, greenspace)
- Build areas for active play in the housing development.
- Employ design elements that encourage physical activity (e.g., low-rise development with well-lit staircases)
- Ensure access to public transportation that promotes active living.
- Consider mixed-use in addition to mixed-income redevelopment that encourages walking and provides access to healthy foods.
- Work with surrounding institutions and services already in place for joint use of parks.
- Solicit and follow resident input.

References

- Aytur, S.A., Rodriguez, D.A., Evenson, K.R., Catellier, D.J., and Rosamond, W.D.. Promoting Active Community Environments Through Land Use and Transportation Planning. *Am J of Health Promotion*. 2007 March/April; 21 (4): 397-407.
- Babey, S.H., Diamant, A.L., Hastert, T.A., Harvey, S., Goldstein, H., Flournoy, R. et al. (2008). "Designed for Disease: The Link Between Local Food Environments and Obesity and Diabetes." UC Los Angeles: UCLA Center for Health Policy Research. Retrieved from: <http://healthpolicy.ucla.edu/pubs/Publication.aspx?pubID=250>
- Babey, S.H., Hastert, T.A., & Brown, E. R. (2007). "Teens Living in Disadvantaged Neighborhoods Lack Access to Parks and Get Less Physical Activity." UC Los Angeles: UCLA Center for Health Policy Research. Retrieved from: <http://escholarship.org/uc/item/4ww2p7v4> 10.1371/journal.pmed.0040306
- Beaulac J, Kristjansson E, Cummins S. (2009). "A systematic review of food deserts, 1966-2007." *Prev Chronic Dis*. Jul;6(3):A105.
- Bennett G.G., McNeill L.H., Wolin K.Y., Duncan D.T., Puleo E., Emmons, K.M. (2007). "Safe To Walk? Neighborhood Safety and Physical Activity Among Public Housing Residents." *PLoS Med* 4(10): e306. doi: 10.1371/journal.pmed.0040306.
- Burdette, H.L., Whitaker, R.C. (2005). "A National Study of Neighborhood Safety, Outdoor Play, Television Viewing, and Obesity in Preschool Children." *Pediatrics* 116, 657-662.
- California Healthy and Human Services Agency. (2005) "A Vision for California – 10 Steps Toward Healthy Living." Sacramento, CA: US. Retrieved from: http://nature.berkeley.edu/cwh/activities/gov_summit.shtml
- Centers for Disease Control and Prevention (CDC). Perceptions of neighborhood characteristics and leisure-time physical inactivity - Austin/Travis County, Texas, 2004. *Morb Mortal Wkly Rep*. 2005 Sep 23; 54 (37): 926-8.
- Cohen et al. (2006). "Park Use and Physical Activity in a Sample of Public Parks in the City of Los Angeles." RAND Technical Report, February
- Florence MD, Ashbridge M, Veugelers PJ. (2008) "Diet quality and academic performance." *J Sch Health*, 78:209-215.
- Fox, KR. (1999) The influence of physical activity on mental well-being. *Public Health Nutrition*: 2(3a), 411-418.
- Frank, L., Kerr, J., Chapman, J. and Sallis, J. (2007). "Urban Form Relationships with Walk Trip Frequency and Distance Among Youth." *American Journal of Health Promotion*. March/April; 21 (14), Supplement: 305.
- Hastert, Theresa A., Babey, Susan H., Diamant, Allison L., & Brown, E. Richard. (2005). More California Teens Consume Soda and Fast Food Each Day Than Five Servings of Fruits and Vegetables. UC Los Angeles: UCLA Center for Health Policy Research. Retrieved from: <http://escholarship.org/uc/item/2vb096qp>
- Heinrich, K.M., Lee, R.E., Suminski, R.R., Regan, G.R., Resse-Smith, J.Y., Howard, H.H. et al. (2007). "Associations between the built environment and physical activity in public housing residents." *International Journal of Behavioral Nutrition and Physical Activity*, 4:56 doi:10.1186/1479-5868-4-56
- Inagami S, Cohen DA, Finch BK, Asch SM. You are where you shop: grocery store locations,

- weight, and neighborhoods. *Am J Prev Med.* 2006;31(1):10-7.
- Johnston, L.D., Delva, J., & O'Malley, P.M. (2007). "Sports participation and physical education in American secondary schools: current levels and racial/ethnic and socioeconomic disparities." *Am J Prev Med*, 33(4), 195-208
- Larson NI, Story MT, Nelson MC. (2009). "Neighborhood environments: disparities in access to healthy foods in the U.S." *Am J Prev Med.* Jan;36(1):74-81.
- Molnar, B.E., Gortmaker, S.L., Bull, F.C., and Buka, S.L. Unsafe to play? Neighborhood disorder and lack of safety predict reduced physical activity among urban children and adolescents. *Am J Health Promotion.* 2004 May/Jun; 18 (5): 378-86.
- Morland, K, Wing, S, Roux, AD (2002). "The Contextual Effect of the Local Food Environment on Residents' Diets," *American Journal of Public Health.* Vol. 92, No. 11 p. 1761-1768. Available at: <http://www.ajph.org/cgi/content/abstract/92/11/1761>
- Morland K, Diez Roux AV, Wing S. Supermarkets, other food stores, and obesity: the atherosclerosis risk in communities study. *Am J Prev Med.* 2006;30(4):333-9.
- Office of Planning and Research (2003). "Governor's Environmental Goals and Policy Report." Sacramento, CA: US, November 2003. Retrieved from: http://www.lgc.org/freepub/community_design/reports/egpr_memo.html
- Office of the Surgeon General. (1996). "Physical Activity and Health: A Report of the Surgeon General." Rockville, MD: US. Retrieved from: <http://www.cdc.gov/nccdphp/sgr/intro.htm>
- Office of the Surgeon General. (2001). "The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity." Rockville, MD: US. Retrieved from: <http://www.surgeongeneral.gov/topics/obesity/>
- Ortega FB, Ruiz JR, Castillo MJ, Sjöström M. (2008) "Physical fitness in childhood and adolescence: a powerful marker of health." *Int J Obes (Lond).* Jan;32(1):1-11
- Pollack KM. (2009). An injury prevention perspective on the childhood obesity epidemic. *Prev Chronic Dis*;6(3). Retrieved from: http://www.cdc.gov/pcd/issues/2009/jul/08_0258.htm.
- Rundle, A., et al. The Urban Built Environment and Obesity in New York City: A Multilevel Analysis *American Journal of Health Promotion.* 2007 March/April; 21 (14), Supplement: 326.
- Simpson, M.E., Serdula, M., Galusak, D.A., Gillespie, C, Donehoo, D., Marcera, C., et.al. (2003). "Walking Trends Among U.S. Adults: The Behavioral Risk Factor Surveillance System, 1987-2000." *American Journal of Preventative Medicine* 25(2), 95-100.
- U.S. Department of Health and Human Services. (2000) *Healthy People 2010.* 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
- Walk Score, <http://www.walkscore.com> accessed September 2009.
- Wilson, D.K., Kirtland, K.A., Ainsworth, B.E., Addy, C.L. (2004). "Socioeconomic status and perceptions of access and safety for physical activity." *Annals of Behavioral Medicine* 28(1):20-28. doi: 10.1207/s15324796abm2801_4

Appendices

Appendix A: Survey Responses for Open Ended Questions

Questions

- What do you like the most about your community?
- What would you change about your community?
- If you were here before the redevelopment, what do you think has changed the most because of it?

Responses separated by housing site below.

Bernal Dwellings

What do you like the most about your community?

convenience
 the community room
 people and family
 the people I hang with
 I love being close to my family and friends.
 I can get anything I want without going out the community.
 the general area
 the people
 the people
 in the center of the city
 the workers in community center
 community centers
 people
 cheap, affordable rent
 safety
 neighbor
 quiet for me and friendly neighbors
 my friends
 better housing
 its better
 It's very nice
 friends and family
 friendly people
 diversity

 my neighbors and that I live close to a grocery stores

 It's turning out to be a little safer to live and let children play
 I like the community togetherness that we have.
 friendly
 nothing
 it's peaceful
 people
 youth center
 nothing
 the culture
 convenience
 my neighbors
 social worker

What would you change about your community?

nothing
 nothing
 violence
 the bad people
 I would change the fact that there is no basketball court
 Day labors hang in front of my apartment
 everything
 more jobs
 the drugs
 have the youngsters get along better
 nothing except the residents participating in the community
 harassment by the police
 nothing
 pesticide
 drug
 drug
 nothing
 nothing
 nothing
 leave it as is
 killings outside
 black on black violence
 bus seeds
 violence
 The men not hanging out who doesn't live here bringing trouble
 to our community with gun violence
 I would rather it be a gated community where only residents have
 access with onsite security.
 more safety
 everything
 some of the people
 closeness
 nothing
 everything
 the protect and service
 separate bins for recycling
 more programming

(Note: responses in the 2 columns are not paired with one another)

North Beach Place

What do you like the most about your community?

safety, convenience in shopping and transportation
 convenience, quiet, decent environment
 quiet, safe
 great property management and great work attitude of the staff
 clean
 clean
 convenient
 clean air, convenience
 safe
 placement
 the beach area
 free food
 my neighbor
 nothing
 very good
 nice people
 everything is close
 convenience
 convenience
 I like my apt.
 nothing
 good location
 my neighbors
 convenience
 good
 location
 nothing
 close to everything
 the things offered/location
 I like my apart
 the housing
 safety
 quiet
 It look like a community but it is a concentration camp where only Chinese people is the supremacy race except elderly Chinese
 quiet, clean, safe
 it's clean
 convenience and safety

What would you change about your community?

none
 none
 none
 safe
 safe
 restrooms
 no smoking
 nothing
 that there would be more unity among inhabitants
 security
 security organization
 nothing
 all
 nothing
 parking for visitors
 no smoking
 more freedom to children activities eg. biking for children under 5
 more freedom to children activities
 play areas for kids
 I don't feel safe, a group of people stand outside the building
 another entrance on Trader Joe's side
 jobs placement and fun activity and/or area
 I would make people be more considerate and respectful
 I don't think of anything
 neighbors would talk more to each other
 Nothing
 how strick
 none
 The John Stewart Company for Housing Authority
 none
 landlord
 no
 hoods on corner, black guys on Taylor
 none
 a lot
 I don't want to change
 safe and clean

don't know	I don't want to change
area	the people who hang out on the corner
safety	the people who hang out in front of the building
the housing	more group activity
good	Nothing
location	Nothing.
I'd like my community	Todo
don't know	All (todo)
I like my community	None
the people I live around	None
how clean it is	Would like an old fashioned closet in my building - the one on runners breaks all the time.
different nationalities	
decent, nice environment, convenient transportation	
flower garden	
safe, quiet,	
convenient	
Nice people	
The people and the area are good.	
The neighborhood	
Location, cleanness	
Washing machine and dryer, dishwasher.	

(Note: responses in the 2 columns are not paired with one another)

If you were here before the redevelopment, what do you think has changed the most because of it?

Bernal Dwellings

everything
having a community center
There is a little less violence and it is way more sanitary.
crime
the housing structures
housing
the look changed
the young people are getting worse
the people because of the new environment
the programs
people
shooting
safety
maintenance is better
all the buildings
the building complexes
the houses
some people, building and how it look
The places are better but the walls are thin
Everyone is able to communicate with each other better than
before dissolving problems with gun play
The overall attitudes of our homes. We felt dirty living in
rundown housing. Now we feel a lot better.
houses
the violence has decreased

North Beach Place

safe
safety
security and cleanliness
change for everything
The neighborhood, staff, residents security
it's okay
different levels of income and education
crime
The apartment are much better
landlord and property management
the security guards, clean, safety
the area is very clean
safety and cleaning
everything is new
landlord and property management
more rooms nicer
Most dangerous/bad tenants are gone.

Appendix B: Monthly Crime Profiles

Citywide crime profile (SFPD, Compstat for Dec 26, 2009)

 COMPSTAT CITY WIDE PROFILE 11/29/2009 TO 12/26/2009 Chief of Police												
Population: 776,733 Area: 48.1 square miles Total Sworn: 2,339		 George Gascón		Administration: Field Operations: Investigations: MTA: Airport:		Assistant Chief Tabak Assistant Chief Cashman Commander Loftus Deputy Chief Murphy Deputy Chief Shinn						
Crime Statistics for week ending 12/26/09												
CRIME STATISTICS	VIOLENT CRIMES			11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD		% Change
	HOMICIDE	2	4	-50%	4	3	33%	46	97	-53%		
	RAPE	12	12	0%	12	19	-37%	159	174	-9%		
	ROBBERY	235	285	-18%	285	292	-2%	3492	4066	-14%		
	AGGRAVATED ASSAULT	242	283	-14%	283	278	2%	3620	3801	-5%		
	TOTAL VIOLENT	491	584	-16%	584	592	-1%	7317	8138	-10%		
	PROPERTY CRIMES			11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD		% Change
	BURGLARY	382	375	2%	375	377	-1%	5131	5431	-6%		
	AUTO THEFT	314	380	-17%	380	360	6%	5081	6206	-18%		
	BURGLARY THEFT FROM VEHICLE	636	857	-26%	857	900	-5%	11075	12180	-9%		
ARSON	13	20	-35%	20	17	18%	215	220	-2%			
PERSONAL/OTHER THEFT	785	1036	-24%	1036	1073	-3%	13033	12946	1%			
TOTAL PROPERTY	2130	2668	-20%	2668	2727	-2%	34535	36983	-7%			
TOTAL PART 1	2621	3252	-19%	3252	3319	-2%	41852	45121	-7%			
CHILD/SPOUSAL ABUSE	35	77	-55%	77	76	1%	1157	1113	4%			
SHOTS FIRED	9	6	50%	6	5	20%	97	110	-12%			
SHOOTING VICTIMS	0	0	0%	0	0	0%	0	0	0%			
ARREST STATISTICS	ARRESTS			11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD		% Change
	HOMICIDE	3	2	50%	2	1	100%	33	33	0%		
	RAPE	5	5	0%	5	12	-58%	55	54	2%		
	ROBBERY	51	93	-45%	93	112	-17%	968	1055	-8%		
	AGGRAVATED ASSAULT	88	166	-47%	166	134	24%	1921	1991	-4%		
	BURGLARY	40	60	-33%	60	51	18%	769	650	18%		
	ARSON	1	3	-67%	3	1	200%	24	32	-25%		
	LARCENY	170	213	-20%	213	215	-1%	3033	3196	-5%		
	AUTO THEFT	19	5	280%	5	11	-55%	133	268	-50%		
	TOTAL VIOLENT	147	266	-45%	266	259	3%	2977	3133	-5%		
TOTAL PROPERTY	230	281	-18%	281	278	1%	3959	4146	-5%			
TOTAL PART 1	377	547	-31%	547	537	2%	6936	7279	-5%			

Prepared by: COMPSTAT

Statistics are preliminary and subject to further analysis and revision

Print date: 12/29/2009

Central Station (including community surrounding North Beach Place) crime profile (SFPD, Compstat for Dec 26, 2009)

 COMPSTAT CENTRAL PROFILE 11/29/2009 TO 12/26/2009										 DISTRICT SUPERVISORS District 2: Michela Alloto-Pier District 3: David Chiu District 6: Chris Daly		
Population: 68,814 Area: 1.8 Square Miles		No Photo Available				Captain Anna Brown						
Crime Statistics for week ending 12/26/09												
VIOLENT CRIMES	11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD		% Change			
							2009	2008				
HOMICIDE	1	1	0%	1	0	not cal	3	2	50%			
RAPE	0	0	0%	0	2	-100%	12	13	-8%			
ROBBERY	9	27	-67%	27	22	23%	251	301	-17%			
AGGRAVATED ASSAULT	14	23	-39%	23	20	15%	261	282	-7%			
TOTAL VIOLENT	24	51	-53%	51	44	16%	527	598	-12%			
PROPERTY CRIMES	11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD		% Change			
							2009	2008				
BURGLARY	33	43	-23%	43	43	0%	598	631	-5%			
AUTO THEFT	17	25	-32%	25	26	-4%	411	471	-13%			
BURGLARY THEFT FROM VEHICLE	79	138	-43%	138	138	0%	1512	1617	-6%			
ARSON	0	1	-100%	1	1	0%	17	19	-11%			
PERSONAL/OTHER THEFT	108	169	-36%	169	159	6%	2109	2113	0%			
TOTAL PROPERTY	237	376	-37%	376	367	2%	4647	4851	-4%			
TOTAL PART 1	261	427	-39%	427	411	4%	5174	5449	-5%			
CHILD/SPOUSAL ABUSE	0	2	-100%	2	6	-67%	44	68	-35%			
SHOTS FIRED	0	0	0%	0	0	0%	2	4	-50%			
SHOOTING VICTIMS	0	0	0%	0	0	0%	0	0	0%			
ARRESTS	11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD		% Change			
							2009	2008				
HOMICIDE	2	0	not cal	0	0	0%	3	6	-50%			
RAPE	0	0	0%	0	0	0%	6	2	200%			
ROBBERY	2	13	-85%	13	7	86%	80	81	-1%			
AGGRAVATED ASSAULT	8	15	-47%	15	9	67%	142	167	-15%			
BURGLARY	3	7	-57%	7	6	17%	81	67	21%			
ARSON	0	1	-100%	1	0	not cal	6	2	200%			
LARCENY	9	24	-63%	24	22	9%	296	267	11%			
AUTO THEFT	0	0	0%	0	1	-100%	9	10	-10%			
TOTAL VIOLENT	12	28	-57%	28	16	75%	231	256	-10%			
TOTAL PROPERTY	12	32	-63%	32	29	10%	392	346	13%			
TOTAL PART 1	24	60	-60%	60	45	33%	623	602	3%			

Incident Data Source: Crime Analysis CABLE/IRS

Statistics based on date of +ased on date of occurrence

Prepared by: COMPSTAT

Statistics are preliminary and subject to further analysis and revision

Print date: 12/29/2009

Mission Station (including community surrounding Bernal Dwellings) crime profile (SFPD, Compstat for Dec 26, 2009)

 COMPSTAT MISSION PROFILE 11/29/2009 TO 12/26/2009											
Population: 84,190 Area: 2.7 Square Miles		No Photo Available Captain Gregory Corrales				DISTRICT SUPERVISORS District 6: Chris Daly District 8: Bevan Duffy District 9: David Campos					
Crime Statistics for week ending 12/26/09											
CRIME STATISTICS	VIOLENT CRIMES			11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD	
	HOMICIDE	0	1	-100%	1	0	not cal	4	18	-78%	
	RAPE	2	1	100%	1	2	-50%	22	29	-24%	
	ROBBERY	32	37	-14%	37	32	16%	530	616	-14%	
	AGGRAVATED ASSAULT	37	34	9%	34	50	-32%	522	583	-10%	
	TOTAL VIOLENT	71	73	-3%	73	84	-13%	1078	1246	-13%	
	PROPERTY CRIMES			11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD	
	BURGLARY	31	32	-3%	32	26	23%	426	533	-20%	
	AUTO THEFT	60	84	-29%	84	58	45%	734	868	-15%	
	BURGLARY THEFT FROM VEHICLE	62	72	-14%	72	48	50%	835	1179	-29%	
	ARSON	1	1	0%	1	1	0%	11	15	-27%	
	PERSONAL/OTHER THEFT	86	151	-43%	151	124	22%	1591	1440	10%	
	TOTAL PROPERTY	240	340	-29%	340	257	32%	3597	4035	-11%	
	TOTAL PART 1	311	413	-25%	413	341	21%	4675	5281	-11%	
	CHILD/SPOUSAL ABUSE	4	19	-75%	16	16	0%	186	150	-2%	
SHOTS FIRED	0	1	-100%	1	0	not cal	7	11	-36%		
SHOOTING VICTIMS	0	0	0%	0	0	0%	0	0	0%		
ARREST STATISTICS	ARRESTS			11/29/2009 to 12/26/2009	11/1/2009 to 11/28/2009	% Change	11/1/2009 to 11/28/2009	10/4/2009 to 10/31/2009	% Change	YTD	
	HOMICIDE	0	0	0%	0	0	0%	2	2	0%	
	RAPE	1	0	not cal	0	0	0%	3	4	-25%	
	ROBBERY	8	10	-20%	10	13	-23%	169	166	2%	
	AGGRAVATED ASSAULT	16	22	-27%	22	25	-12%	312	310	1%	
	BURGLARY	4	8	-50%	8	0	not cal	73	59	24%	
	ARSON	0	0	0%	0	0	0%	1	5	-80%	
	LARCENY	17	27	-37%	27	29	-7%	349	332	5%	
	AUTO THEFT	3	0	not cal	0	0	0%	24	28	-14%	
	TOTAL VIOLENT	25	32	-22%	32	38	-16%	486	482	1%	
	TOTAL PROPERTY	24	35	-31%	35	29	21%	447	424	5%	
TOTAL PART 1	49	67	-27%	67	67	0%	933	906	3%		

Prepared by: COMPSTAT

Statistics are preliminary and subject to further analysis and revision

Print date: 12/29/2009

Appendix C: Summaries of Key Informant Interviews

Perspectives on Redevelopment and Health Bernal Dwellings Key Informant Interview Summary

The HOPE VI Program was developed as a result of recommendations by National Commission on Severely Distressed Public Housing, which was charged with proposing a National Action Plan to eradicate severely distressed public housing. The Commission recommended revitalization in three general areas: physical improvements, management improvements, and social and community services to address resident needs.¹

In 1992 the U.S. Department of Housing and Urban Development (HUD) initiated a \$5 billion public housing redevelopment project called Housing Opportunities for People Everywhere (HOPE VI). Poor quality public housing can have multiple negative impacts on health, from environmental hazards leading to respiratory disease and injury to social hazards leading to crime and violence. Alternately, high quality public housing has the opportunity to decrease stress associated with affordability, crime, and social exclusion. With HOPE VI, public housing redevelopment (PHR) had an opportunity to address health concerns by redesigning and rebuilding the physical structures in housing sites as well as instituting policies to improve residents' health.

The University of California, Berkeley School of Public Health, the non-profit Human Impact Partners (HIP), and the San Francisco Department of Public Health are currently conducting a retrospective Health Impact Assessment (HIA) of HOPE IV redeveloped sites. This assessment was conducted in cooperation with the on-site community centers that serve residents of the public housing sites. HIA is a process used to evaluate how a proposed policy, plan, or project impacts the health of a population. By conducting a retrospective HIA, we hope to understand how redevelopment may have impacted residents' health in two HOPE VI redeveloped housing projects (Bernal Dwellings and North Beach Place) in San Francisco. Additionally, the research will offer recommendations to the new HOPE SF effort as public housing sites are redeveloped in the near future.

This HIA utilized a combination of primary and secondary data sources and qualitative and quantitative research methods to be able to judge health impacts of redevelopment of public housing. These techniques include scientific literature review of the connections of public housing and health; secondary data collection of statistics about demographics, health outcomes, access to various goods and services, and utilization; and resident opinions and behaviors data collection such as surveys and interviews.

The following document is a summary of results from 11 key informant interviews regarding how the redevelopment in 2004 of North Beach Place, a housing project in San Francisco, CA, affected the health of residents. These results will eventually be combined with all other data in the form of a full Health Impact Assessment report, which will include recommendations to mitigate negative health impacts (to be available at <http://ehs.sph.berkeley.edu/hia>).

Key informants were residents or recent residents of Bernal Dwellings, and Bernal Dwellings management. The findings reported here are specific to Bernal Dwellings. Views on redevelopment and health are likely to vary between different housing sites.

Several themes emerged that are discussed in more detail in the pages below:

- I. Healthy Housing and Environmental Health**
 - Building Quality
 - Maintenance Issues
 - Management Response to Maintenance Requests
 - Affordability

¹ HUD. What is HOPE VI? US Dept. of Housing and Urban Development. Available at <http://www.hud.gov/offices/pih/programs/ph/hope6/>. Accessed on July 2, 2009

- II. Displacement**
 - Displacement

- III. Public Participation and Social Cohesion**
 - Tokensim in the Planning Process
 - Relationship with Management
 - Eviction
 - Social cohesion/exclusion

- IV. Opportunities for Healthy Eating and Active Living**
 - Places for physical activity
 - Access to Healthy, Affordable Food

- V. Crime and Safety**
 - Safety
 - Racism
 - Relationship with Police

- VI. Programming and Services**
 - Schools
 - The Center

- VII. Management's Perspective**

I. HEALTHY HOUSING AND ENVIRONMENTAL HEALTH

BUILDING QUALITY

Many residents appreciate the beauty and initial cleanliness of the newly redeveloped apartments, but are ultimately unsatisfied with the building quality. They feel that the project was rushed and *“everything was put together too fast.”* Homes are seen as more modern, bigger, and cleaner than before redevelopment; however, residents feel more attention was given to making the buildings attractive, rather than creating high quality residences that would last over time. One resident summed up, *“The places looked nice, but they’re cheap.”* Another resident who was one of the first people to move into Bernal after redevelopment stated, *“everything started to break down within the first month.”* Recurring issues residents reported were: substandard carpeting with no padding underneath, thin walls with low quality paint, cheap materials and appliances, and poor quality building design.

Carpet: Due to lack of cushioning underneath the carpet, liquid spills pool on the concrete below, potentially leading to growth of mold and bacteria and recurring stains even after cleaning. Thin carpets do not muffle noise between apartments and neighbors can hear each others’ movements. One woman reported that the lack of cushioning made it dangerous for her children to play in the apartment. *“The carpet is straight on the concrete, no cushions under it, so the floor is really hard...When the kids fall on the carpet it can take their skin off.”* Some units are currently being remodeled and will have padding under the carpet.

Walls and Paint: Thin walls lead to being able to hear conversations and noise from outside and from neighboring apartments. Walls were painted with flat paint, and several people reported that if they tried to wash the walls, the paint would flake off and create holes in the walls. *“We don’t have glossy paint, so if you lean on the wall with jeans it gets blue, if your kid touches it with dirty hands it gets black. When we try to wipe it, it wipes off the paint.”*

Appliances and materials: One resident said that her dishwasher broke within two weeks of moving into the apartment. Another resident said that there was an issue with the washer and dryer when he moved in. Two residents mentioned that the window screens popped out easily and were worried that their children might fall out. Also, because there were no screens in the windows, her child was hospitalized for bites from spiders that had gotten in through the open window. Another resident stated the garbage disposal broke 4 to 5 times.

Poor Design: Residents mentioned that the buildings were poorly designed. There are no fire escapes from the second floor. Additionally, the plumbing is designed in such a way that if a one apartment’s sink or toilet becomes clogged, then the neighboring apartment’s sink or toilet also becomes clogged. Another resident told interviewers that in certain apartments, turning on the heat sets off the fire alarm.

Attention to the outside appearance of the housing complex and lack of attention to the indoor quality of the homes continues to this day, as can be seen by the management’s choice of where to focus maintenance efforts. One resident stated, *“They put in a lot of effort on appearances – how things look on the outside. They’re always steam cleaning the sidewalks, painting stuff, but they don’t fix the things that are going wrong INSIDE. Like when an apartment is flooded, or the ceilings are moldy.”*

MAINTENANCE ISSUES

When asked how many units had some kind of maintenance problem, one respondent answered *“100%.”* The most common concerns were mold, rodents, and garbage. Additional concerns included bees, broken handrails along stairways, cockroaches, and lack of general cleanliness. Several people have gotten sick because of these maintenance issues.

Mold: A little under half of the interviewed residents reported black mold growing in the carpet, walls, or toilet. They felt that the mold growth in their homes is linked to the asthma and other respiratory issues they and their family members experience. One mother reported, *“My sons have asthma from the mold. When I run the dryer*

and it gets hot in the apartment, they start coughing because of the mold in the walls.” Replacing the mold-infested materials is important to preserving the health of residents. For example, one mother noticed, “I have asthma and my son has asthma. My daughter got the croup a few times. Now [after replacing the carpet] they are fine and not getting as sick.”

Rodents: Residents reported that rodents were an issue both in their homes and in the complex in general. One resident had so many mice that when the poison was put out, *“every morning when I woke up, there would be at least five mice dying in the middle of my living room.”* Another resident remarked, *“It is rat city in the backyard.”*

Garbage: The rodent and cockroach problem seems to stem from the fact that garbage is not collected often enough. *“The garbage cans are right under the houses...you can smell it.” “Trash is overflowing and it brings mice...When it is full, people put garbage on the ground and the garbage people don’t pick it up. There are cockroaches.”*

This general lack of cleanliness in the trash areas may also be creating an unsafe area in the housing complex. One resident said, *“People use [the streets] as a bathroom and they throw garbage anywhere they want. The city doesn’t clean it, the people wait for maintenance to come and do it.”* Lastly, *“because there is an outside source of water in the garbage chute area, homeless people take showers there, and people use that area to do drugs. It’s not safe, and it’s dirty and smelly.”*

MANAGEMENT RESPONSES TO MAINTENANCE REQUESTS

Management response to maintenance requests is slow and inadequate. The most common complaint was that it took a long time for a maintenance person to respond to a request and the quite often, the maintenance person was not able to fix the issue. The average response time seems to be a minimum of 2 weeks, but can go up to a whole month or more before the problem is addressed. One resident reported that even in high priority situations, such as the front door lock being broken, the maintenance response was still 2 weeks. This may be due to the fact that there are not enough maintenance people. In other situations, maintenance requests can languish for years. One resident shared that *“Rodents chewed through my wall and they left the hole there for 2 years.”* Another said that her dishwasher broke within 2 weeks of moving in, but that it did not get fixed for eight years.

Several residents reported that the maintenance person was unable to resolve their requests and that they had to repair the issue on their own. The reasons given for this were:

1. **The issue could not wait** (e.g. broken front door lock);
2. **Maintenance unable to fix the problem** (e.g. *“when our dishwasher was broken, they came a week later to fix it. But then we still had problems with it, so my stepdad just fixed it.”*)
3. **Maintenance said the issue was resolved, but actually was unable to fix the problem** (e.g. the maintenance man *“went in and messed around with it and came out saying that it was fixed, but it wasn’t; it was still leaking. We had to go and buy our own and do it ourselves.”*); or
4. **Maintenance unable to locate the problem and put responsibility back onto residents** (e.g. *“We called about the stench, but when they came over to investigate and couldn’t figure out where it was coming from, they just said they couldn’t do anything about it.”*)

Maintenance staff deals with the issues but slowly, and sometimes with the burden of payment on the resident even when they are not at fault. *“Some people have molding on their ceiling because of the people above them, and the management says, ‘it’s your fault, you have to pay to fix it.’ Or sometimes the carpeting wasn’t changed when people move in, and if there’s still a problem from the last tenants, the management will make the current resident pay.”* One resident noted that the new manager was more efficient at responding to maintenance requests than the previous manager. Another resident remarked that the person who runs the community center helps speed up the process of getting mold issues addressed.

One key informant summed up the situation by saying, *“It seems like you have to put in a couple of maintenance requests in order for management to even look at your problem. Then they come out and look at it,*

but they don't fix it. They might show up, but they never seem to fix it. They hire people who are not qualified to fix things."

Poor housing quality and delayed maintenance cause stress, for example: *"I'm more stressed. When we moved back, I have back problems, migraine headaches for thinking about the mold, the fridge leaks, the carpet is lifting up and they don't want to do anything about it."* In the case of a broken front lock, *"My mother was stressed out because she was worried about people coming into the house"*.

AFFORDABILITY

While a few residents felt that cost of living at Bernal Dwellings is reasonable, others felt that living at Bernal Dwellings was not affordable. One person noted that money was so tight from housing cost burden that she had not eaten for two days. Another person summed up the change in affordability after redevelopment this way: *"The cost [of living here] went up because now they are 'townhouses', but my income went down. You need some income to live here [now], before you didn't."*

In particular, paying for utilities, such as water and PG&E, made living at Bernal unaffordable. Several residents noted they did not have to pay for utilities at other public housing facilities from which they had rented: *"At Potrero I didn't have to pay PG&E and water; here, you have to pay PG&E and water. It's a lot of money. I can't buy my kids' tennis shoes. [Paying utilities] took a lot of money away."*

Additionally, the current policy of raising rent when a resident has gotten a slightly higher-paying job felt unfair and impacted residents' ability to afford rent. Although none of the interviewees stated that they had not taken a job because for fear of raising their rent, some intimated that they avoid reporting an increase in income.

Residents who felt that the cost of living at Bernal Dwellings was unaffordable corroborated public health literature linking affordability of housing to health outcomes: one said that she could not afford food sometimes, one mentioned overcrowding (10 people in a 3-person apartment), one mentioned not being able to buy her child new tennis shoes because utilities had taken much of her money.

Financial burden is another major cause of stress; the increased prices of housing, utilities, food, and transportation.

II. DISPLACEMENT

During the redevelopment process, most residents relocated to the East Bay (e.g. Oakland, Hayward, etc.). Some residents stayed with relatives or friends, while others lived in apartments, using Section 8 vouchers. The East Bay was described as being quieter than San Francisco: *"Being in Oakland was calmer...quieter. No guns."*

Relatives and close friends were scattered throughout the greater Bay Area. Long commutes made getting together harder. They tried to keep in touch with friends every once in a while, and saw relatives mostly on holidays. A couple of interviewees moved to public housing in the Potrero Hill and Bayview Hunters Point neighborhoods of San Francisco and remarked about the hassle of being displaced: *"It was hell moving away. It was hard because it was last minute and you had to come up with the move-in money...Then I got used to [living in Potrero] and had to move [back]...I had to switch schools for the kids so that the schools would be closer, but they didn't want to switch schools. They [SFUSD] made me do the run-around and get letters and things like that to switch them. It was a really hard adjustment to the new school and my kids acted out because of it. It really strained our relationship."* And: *"When we moved I was diagnosed with major depression and bipolar [disorder]. I don't know if it was connected to the move, but I noticed it after I moved. It affected my mood."*

Overall, displaced residents and new residents were eager to move to the new Bernal Dwellings. *"Most people have changed their lives so that they could come back here. They want to do better, and they were forced to do better."* And: *"We wanted to come back because it was new and looked nice."*

However, not everyone moved back or were not allowed to move back: *"A lot of people couldn't come back because they had a record...A lot of people moved out of the city and didn't come back. It displaced the community. I would also have equal amount of housing [built]; I think we lost 30 apartments."*

Residents experienced stress when they had to move to other housing during redevelopment, find schools for the children, and live away from their community. Additionally, they experienced stress when they had to move back and re-integrate into the Bernal Dwellings community.

III. PUBLIC PARTICIPATION AND SOCIAL COHESION

TOKENISM IN THE PLANNING PROCESS

On the surface, the San Francisco Housing Authority engaged existing residents in the redevelopment planning process. They conducted a series of meetings to gather residents' ideas about what types of communities they wanted to move back to and live in: *"We wanted the complex to be gated off, with a community center in the middle. We had meetings. We filled out surveys. They made us feel like our input meant something."* And, *"I went to almost all of the community meetings. We asked for garages and a play area."*

However, the redeveloped Bernal Dwellings complex was not built as residents suggested. Interviewees felt they were tokenized - asked for their opinions only as a formality, that their input was not taken into consideration, and they felt taken advantage of.

- *"This is not how we wanted it. So now everyone was like 'I don't like this. I want to go'. They should have kept the original plan – then people would enjoy it vs. complaining."*
- *"There were supposed to be garages, but we didn't get those. Also, there are no fire escapes for people on the upper floors. No ladder, etc. It's poor planning."*
- *"We asked for a gated community, with a play area for the kids, and garages. And we got none of it."*
- *"They promised us opportunities to use Section 8 vouchers on Rent-to-Buy units."*

RELATIONSHIP WITH MANAGEMENT

Residents were divided on how they viewed their relationship with current management. Some felt the new manager was more efficient at dealing with their requests than the previous management team, but others felt that the new manager was not someone they could trust. *"The manager here is manipulative – one day she's on your side, the next day she's on the housing authority's side."* In particular, residents worry about the management's strictness in evicting people. *"If you are behind on water or rent or PGE, they will give you a 14 day eviction notice; maybe you could pay it next month and you will; but they'll give it to you over [a matter of] \$3."* A second resident felt the same way, *"She doesn't care about people in this place. She doesn't give any opportunity or benefit of the doubt."* Another resident, however, felt that the manager is not strict enough. *"At one point, they had a good management team that was on their toes...stricter on the rent. That's better...people need to know you can't live nowhere for free."*

EVICTON

For most residents, the fear of eviction was constantly present. Although one resident felt that, *"you bring that upon yourself in order to get evicted here,"* most felt that the grounds for eviction are unfair and too strict. *"You raise your income a dollar and you don't tell them and they'll try to kick you out. They will put you out if you lose your keys to the door or if you got two socks in the middle of the living room - any reason you can think of. Living here you got to live on eggshells."* Some were worried about eviction related to not being to pay for rising housing or utilities costs, others worried about eviction because there were too many people living in one apartment (but all incomes were needed to be able to support themselves and their sick relative), and others were worried about eviction because friends or family members might be involved in criminal activity.

The management targets families that are suspected of being related to, or harboring, gang members. *"If she (manager) thinks they're affiliated in any way with gangbangers, the manager wants them out. Even if they are not involved themselves in gangs and drugs. She'll go after old people, people's grandmas."* Even if the person on the lease has not done anything wrong, management can evict based on what someone living with them has done, or what friends have done – even if the incident occurred in the distant past. *"People have gotten evicted for*

stuff that happened three years ago!" In one case, an incident happened 2 years before, and the case was closed, but the management reopened the case and subsequently evicted the tenant based on something the leaseholder's daughter had done. Residents were very upset with the lack of benefit of doubt in these situations.

The eviction process is very high stress and creates a lot of mistrust between management and residents. *"Before they go through with the evictions, they inspect your house. If you were issued a citation and told to fix something, but you haven't fixed things then you have a greater chance of getting evicted. They inspect the houses once every other month. Sometimes it's a surprise visit. Sometimes you get a note."* When people are evicted, many times they have nowhere else to go. Residents felt antagonistic towards the property management, but praised the staff member, Ms. Harris, at the community center. They felt that she was on their side and would advocate for them when they had been unfairly accused.

The constant fear of eviction is very stressful, particularly that one may be evicted due to others' misbehavior, and the general feeling that the management is looking for reasons to evict people, even on minor issues: *"Living here you got to live on eggshells."*

SOCIAL COHESION/EXCLUSION

Several interviewees remarked that their neighbors were like family: *"Everybody here is like family to me. If they see something going on with you, they'll help you,"* and, *"The whole block where I live is all friends. We look out for each other. I've built a life here, that's why I don't want to move."*

Residents feel the Center is a very supportive environment. In addition to the programs, volunteer, and employment opportunities offered, it is a safe space and a relaxing environment. Additionally, Ms. Harris provides emotional and advocacy support for the residents.

- A teen stated, *"When the Center isn't open, there's nothing to do."*
- An adult said, *"I come here to talk...to vent when stressed...to hear different perspectives. It's a good place to keep young folks off of the street. My daughter has a summer job here...Kids can be here and be safe."*
- *"Even though we are only supposed to focus on teens, we work with all ages—from young kids to old ladies. Any way we can help you, we will. I am very proud of this center because it is like a safe haven for the community."*
- *"That's why I volunteer here. I used to be one of those kids who went down the wrong path, now I want to share my experience with the young ones."*

Nevertheless, some residents expressed that social ties have ruptured after redevelopment. Bernal Dwellings is a community within a community, whose residents are ostracized from the activities in the surrounding neighborhood.

- *"There used to be a strong social network [before redevelopment], but when we moved, it got disrupted. Then when we came back, people didn't know who we were or remember us. It made it hard for me and my sons because they had to fight the kids they didn't grow up with. They don't remember each other so they had to fight."*
- *"The neighbors here are anti-social. They act like they are too good because they live in a "townhouse." It's worse because the young [African-American] kids fight with the Mexicans. When I moved, all my social connections went away because everyone had new phone numbers, new locations, new everything. It was hard to stay in contact with people."*
- *"The surrounding community has shut us off, like we're a plague....a disease. They are outside; we're inside."*

IV. OPPORTUNITIES FOR HEALTHY EATING AND ACTIVE LIVING

PLACES FOR PHYSICAL ACTIVITY

The public park across the street from the housing development was redeveloped at the same time as Bernal Dwellings. Some informants felt the park was safe; others did not. Although some felt that the park was

indeed “better” than before redevelopment, others indicated that there were specific needs that were not being met. The park was designed with amenities for small children; but there are no activities/resources for teens (like basketball courts *with hoops* and lights for evening activities) or adults (weightlifting, etc). Additionally, gang activity, police harassment, day labor loitering, drug traffic, and racism from the organization that runs the play area were also deterrents for residents using the park facilities.

Many felt that a play area accessible to all residents directly in Bernal Dwellings would be useful, and that they had asked for that with the redesign and not gotten it: *“We need our own play area; the park isn’t enough. With all the gang activity, some kids and parents are scared to go over there. We need our own.”* They also had asked for basketball courts and not gotten those. Some noted that because of a lack of space to play, that kids play in the street, which is dangerous due to traffic: *“They play right in the middle of the project, where cars drive and don’t stop at signs.”*

HEALTHY FOOD RETAIL

The few residents who commented on the amount and availability of healthy food retail felt that, though there is an adequate amount of grocery options in the neighborhood, the quality of those outlets is not necessarily the best and can be expensive. One person commented that the corner stores are expensive and have poor quality produce. The quality and affordability of food is not the only deterrent in residents’ ability to eat healthily - one woman commented that although there is a weekly food pantry held onsite, she choose not to get produce from there because she did not cook.

V. CRIME AND SAFETY

SAFETY

In general, residents do not feel safe. Some say it is better now than before redevelopment, others say it is the same. Informants stated that onsite security guards made a large difference in how safe the housing complex felt, however, funding was cut and currently only security cameras and occasional police patrols monitor the area. Cameras are somewhat helpful. Most interviewees do not feel the police contribute to safety (see also RELATIONSHIP WITH POLICE) Residents shared stories about being shot, being threatened with guns, and living in the bullet zone. People who are “trouble makers” got housing after the redevelopment.

- *“There are lots of shootings and people that sell drugs that hang out on corners. Me and my neighbors used to put the kids to bed at night and then hang out in front of our houses smoking cigarettes and talking about parenting tips. But then someone came by and shot at us.”*
- *“They don’t care about safety. When they had a security guard, crime was down. Then they fired him because of lack of funds. Right after that, the crime level went sky high. It got so bad that my grandbaby would hear a firecracker and run and hide. People are out here selling drugs. There are break-ins.”*
- *“There’s a lot of violence here – shooting, stabbing, home invasions, police harassment. Something happens every day”.*

Parents feel that the area is not safe for their kids: there is not enclosed area in which they can play; some felt the park across the street is unsafe for kids to play alone; and parents cannot watch their children all day. Thus, children play ‘under the house’ - where the road is. Cars driving through the project often do not slow down or stop at the stop signs. Residents would like to have an enclosed playground within the complex. There is such a playground within the complex but it belongs to the day care and cannot be used by the residents. Kids and teens are recruited to gangs, and are in danger of being drawn into drugs, drug dealing, crime, and violence. Residents feel there is no safe place for kids to hang out other than the Center, which closes at 5. *“The kids are in the street as they have nowhere to go. When they come here (to the center) they enjoy and stay out of trouble.”*

Safety issues cause stress, both crime in the area and fear of police harassment. Several residents spoke of worries about being accidentally shot: *“(Living here is) stressful. One time, my daughter had just walked out of*

the house and I heard gunshots. My blood pressure went up". People particularly worry about children being recruited to gangs, drawn to crime, and jailed.

RACISM

Residents experienced racism from several sources: the surrounding community, the school in the complex, the management, and mainly the police. The majority of interviewees African American or of mixed ancestry and incidents were mostly about racism toward African Americans and also about residents of public housing.

Surrounding community: Some residents felt that residents of the public housings are not wanted in the area. One interviewee stated, *"The surrounding community has shut us off, like we're a plague....a disease. They are outside; we're inside."* Several mothers said that the African American kids are not welcome in the day care in the complex. *"The school next door was supposed to be for kids from Bernal Dwellings, but they send us up the street. My son got in here, but they were prejudiced, he was the only black child. Once they complained and I had to keep him home for a couple of days in order not to lose the place. They all speak Spanish, and my son didn't understand. With my sickness I couldn't walk far to take them to school, they wanted to put him in 24th street. A lot of people had to do it."*

Management: One resident felt that management is racist towards African Americans: *"People say that they are trying to get the black residents out. A lot of the new are Chinese or Spanish. It used to be all black."* Another resident said *"Management is racist because every time someone's house gets broken into, they accuse my son, even when he's at school. The management targets my son."*

Police: Most stories about racism relate to the police (see also RELATIONSHIP WITH POLICE), and to policemen targeting African Americans because of their skin color. Interviewees and their relatives experience police harassment. *"If police come it's to target individuals who are not doing anything. They are guilty by being black. I have seen the police beating people up, slamming them onto the pavement. They search individuals when they have no rights. I experienced it as well."*

RELATIONSHIP WITH POLICE

Almost all of the interviewees expressed distrust of the police, and that police do not do their job. Moreover, there is police harassment, including towards young children. Residents gave examples where police have been racist, have searched people for no reason (including young children when they are alone without parental consent), threaten people, beat them, and address them in sexually inappropriate ways. Some people said that the police are present, but do not do their job in addressing bigger problems such as crime and drugs.

During the redevelopment planning process, residents had wanted a gated community because they wanted to be able to protect themselves from rival gang activity and anonymous aggression, but instead the redeveloped complex is split with a road so the police can patrol conveniently. The Center is the only place people felt they and their kids feel safe from police harassment. For example:

- *"Not only am I scared about [my kids] being shot and recruited by older men, but I also have to be scared about the police. Just because [my child] is black and someone did something, they searched him. They had no right to do that especially without a parent around."*
- *"The police are really mean. My son was in football. He was 9 and walking home from practice and the police stopped him and searched him. I didn't even know until my son told me a few days later that he didn't want to go anymore because he was scared of the police."*
- *"Police harassment happens every day – for no reason. Police harassment has gotten worse. Now it's more open so they think they can see everything. It seemed like the police were scared before and now they're not scared. I've heard them say things like, 'I can't wait until you turn 18 because then I can put you away, and, 'I'm going to beat the shit out of you.' They beat people, tackle people."*

VI. PROGRAMMING AND SERVICES

SCHOOLS

There were some issues around switching schools due to redevelopment & moving; that it was not easy to get into a new public school, and that it was hard for the youth to adjust to the changes (acting out; strains in relationship with parents). Also some youth missed school because of redevelopment – either from switching schools and the wait to get into schools or helping relatives move: *“When I moved back to Bernal I was out of school for a while, maybe a ½ year, because there were no positions open in the schools over year. So, I got held back.”*

In Bernal Dwellings, there was recognition that an on-site day care center that was supposed to be available to residents appears to actively discriminate against non-Spanish speaking community members. This results in difficulty in admission and discomfort if non-Spanish speaking children are accepted.

THE COMMUNITY CENTER AS A RESOURCE

It is clear that one of the beneficial outcomes of redevelopment was the establishment of the Mission Neighborhood Community Center at Bernal Dwellings, specifically with Ginale Harris, who is a committed, hard-working advocate for the residents. Many residents stated that the most valuable things about the Center are its status as a safe, comfortable haven where no nonsense, crime, or *“b.s. and bad attitude”* is tolerated (see also SOCIAL COHESION/EXCLUSION). Particularly this aspect of the Center is of great value for youth: *“We need more community centers so the kids won’t get into trouble. If there were more [centers], then maybe a lot of teens would still be alive.”* Statements about “keeping the peace” and “safety” and an alternate place to be rather than the streets was echoed among interviewees. Lastly, there are community events, like parades, that they hear about through the center and like to attend.

While no programming is necessary in order for the Center to be considered a positive force in residents’ lives, it is also an overwhelming value that there are programs, services, and advocacy that Ms. Harris offers. Most heartfelt were residents’ comments that Ms. Harris had advocated for them with the management against eviction, had helped their son to get a job, had supported them in times of mental distress, and had helped them with the school district. The fact that Ms. Harris has gained a tremendous knowledge of the system in the time working at the Center which enables her to offer services navigating the system as well as championing residents in their trials is crucial to the well-being of many residents.

Others talked about working or volunteering at the Center as a way to give back or to stay out of harm’s way. People use the computers and internet at the Center, and have gotten job counseling and services through the Center. Students get help with their homework and are able to concentrate on their studies. People like anger management resources, the food bank, the toy drive, and vacation planning/funding.

Residents who were interviewed had much fondness for Ms. Harris and the Center, and recognized its impact on their mental and social health. Those that have been at Bernal Dwellings for a while noted the difference between Ms. Harris and the former director of the Center, who was corrupt, stole money, and cheated residents out of services.

Interviewees offered some suggestions for programming and services: motivation skills; programs to help people get permanent housing; more sports leagues; community brunches; groups for moms to get together and talk about the environment and issues they have with their children; mental health specialists for all those suffering trauma and substance abuse; movie nights for kids; exercise classes like Hip Hop; and others.

VI. MANAGEMENT’S PERSPECTIVE

One of major changes with HOPE VI redevelopment was the transition of Bernal Dwellings from Housing Authority management to a private management company, McCormack Baron Ragan Management Services. We interviewed the manager for Bernal Dwellings to assess her perspective on relationships with Housing Authority, residents, and the ongoing health issues for residents of Bernal Dwellings.

Management felt that the management company works hand-in-hand with the Housing Authority. Management has to report everything that happens on the property to Housing Authority. There are audits and annual inspections by the Housing Authority. Management has responsibilities to provide safe, clean environment for the residents. They are also mandated to enforce policies and procedures of house rules and leases. They also provide resources to the residents.

The manager felt that she had a good working relationship with residents, and that things are better now than before she took the job 2 years ago. Because she was only working there for 2 years, she does not have much insight into the conditions at Bernal Dwellings before redevelopment. Still, her impression was that with redevelopment some issues, for example with respect to displacement were somewhat addressed. She believes that the relocatees had first priority to come back to the property. And, she believes that previous residents were not denied from coming back. Moreover, she said that some of the conditions were eliminated in order to make individuals eligible to return. There were even incentives made for people to return such as security deposits being paid by Housing Authority, and in some cases first month's rent was free. The goal was to get as many people back as possible. Still, she heard that some found housing elsewhere, and chose to keep rental vouchers that were issued to them. A lot of people were offered vouchers and those who found homes under the section 8 program were able to keep them.

With regard to management's role in improving the health of residents, she said management can play a role by providing a safe environment for residents and helping to ensure that units are maintained. If anyone has trouble maintaining their units then management will provide resources to the individual to help them. Management tries to prevent writing up lease violations. The manager said that she goes above and beyond to help people, and will find social services for people if they need it.

Still there are house rules and lease agreements that must be enforced. Major house rules include paying rent by 5th of each month, keeping your unit clean, and free from clutter, no loud music, reporting your income, and recertifying every year. These rules are enforced through notices. Everything is always documented. Depending on the kind of notice sent there may be legal action. For example, if there was a homicide or a shooting in a unit then the person would be evicted right away.

With regard to programs and services, the manager thinks that they are very important and essential particularly because of the community that they are in. The services are useful and the residents benefit from them. She thinks that educational programs, job opportunities, basic resources like making sure that everyone is aware and understands their lease agreement and their rights as residents are most important. The manager also felt that that more onsite programs are needed. But, she also mentioned that the current programs tend to lack resident participation due to lack of consistency in the programming.

When asked about moving forward with ways management might help to improve the health of Bernal Dwelling residents, she said that first, management has a job to do enforcing the house rules and the leases so the residents feel safe. Aside from that, it is offering resources to residents. Resources, for example, include different agencies that can help with seniors, residents that need case management, home care services. Management has phone numbers and addresses where they can send people for services, but if there were a direct link to onsite services/care that would help improve the health of residents.

Perspectives on Redevelopment and Health North Beach Place Key Informant Interview Summary

The HOPE VI Program was developed as a result of recommendations by National Commission on Severely Distressed Public Housing, which was charged with proposing a National Action Plan to eradicate severely distressed public housing. The Commission recommended revitalization in three general areas: physical improvements, management improvements, and social and community services to address resident needs.²

In 1992 the U.S. Department of Housing and Urban Development (HUD) initiated a \$5 billion public housing redevelopment project called Housing Opportunities for People Everywhere (HOPE VI). Poor quality public housing can have multiple negative impacts on health, from environmental hazards leading to respiratory disease and injury to social hazards leading to crime and violence. Alternately, high quality public housing has the opportunity to decrease stress associated with affordability, crime, and social exclusion. With HOPE VI, public housing redevelopment (PHR) had an opportunity to address health concerns by redesigning and rebuilding the physical structures in housing sites as well as instituting policies to improve residents' health.

The University of California, Berkeley School of Public Health, the non-profit Human Impact Partners (HIP), and the San Francisco Department of Public Health are currently conducting a retrospective Health Impact Assessment (HIA) of HOPE IV redeveloped sites. This assessment was conducted in cooperation with the on-site community centers that serve residents of the public housing sites. HIA is a process used to evaluate how a proposed policy, plan, or project impacts the health of a population. By conducting a retrospective HIA, we hope to understand how redevelopment may have impacted residents' health in two HOPE VI redeveloped housing projects (Bernal Dwellings and North Beach Place) in San Francisco. Additionally, the research will offer recommendations to the new HOPE SF effort as public housing sites are redeveloped in the near future.

This HIA utilized a combination of primary and secondary data sources and qualitative and quantitative research methods to be able to judge health impacts of redevelopment of public housing. These techniques include scientific literature review of the connections of public housing and health; secondary data collection of statistics about demographics, health outcomes, access to various goods and services, and utilization; and resident opinions and behaviors data collection such as surveys and interviews.

The following document is a summary of results from 12 key informant interviews regarding how the redevelopment in 2004 of North Beach Place, a housing project in San Francisco, CA, affected the health of residents. These results will eventually be combined with all other data in the form of a full Health Impact Assessment report, which will include recommendations to mitigate negative health impacts (to be available at <http://ehs.sph.berkeley.edu/hia>).

Key informants were residents or recent residents of North Beach Place, and North Beach Place management. The findings reported here are specific to North Beach Place. Views on redevelopment and health are likely to vary between different housing sites.

Several themes emerged that are discussed in more detail in the pages below:

II. Healthy Housing and Environmental Health

- Housing Environment
- Healthy Housing
- Views on Redevelopment
- Maintenance Services
- Affordability

III. Displacement

IV. Public Participation and Social Cohesion

- Relationship with Management

² HUD. What is HOPE VI? US Dept. of Housing and Urban Development. Available at <http://www.hud.gov/offices/pih/programs/ph/hope6/>. Accessed on July 2, 2009

- Social Cohesion/Exclusion/Tension
- Resident Participation

V. Opportunities for Healthy Eating and Active Living

VI. Crime and Safety

VII. Programming and Services

VIII. Management's Perspective

I. HEALTHY HOUSING AND ENVIRONMENTAL HEALTH

HOUSING ENVIRONMENT

Residents expressed mixed opinions about the housing environment, although overall comments suggested satisfaction and at times, pride. Several residents felt that the rooms and apartments small, while some felt that they are a fine size, even spacious.

There were also several opinions that it was likely that quality had on occasion been sacrificed in an effort to build the public housing economically. For example, some felt that building material were not of the highest quality (like carpeting), and one person felt the pipes were *“too narrow”*. Other people pointed out positive aspects of new construction: *“doors fit tighter and windows are steel”*, and windows that are good at sound-proofing. More than one person felt that the housing environmental is good because no toxic materials were used, such as lead paint.

Many residents brought up the importance of NBP being rodent-free. One person said that prior to redevelopment NBP was *“infested with roaches and rats and now you don’t see any”*. Several people mentioned placement of the dumpsters as being better, the use of garbage chutes as helping in keeping things clean, and regular pick up of garbage.

One resident complained of environmental noise exacerbated by children in the play areas of the courtyard and the use of hard building surfaces that may contribute to the reflection of sound.

Several people talked about indoor and outdoor maintenance, stating that it was good, and many also felt that in general the place is kept clean, which felt healthy to them.

HEALTHY HOUSING

A majority of the residents felt that their health had improved since moving to North Beach Place. They attributed this improvement in their health to a variety of positive aspects that the location and the housing complex provides. Residents cited better transportation options, higher levels of perceived safety, shorter commute time, overall cleanliness of the property, and strong social networks as reasons their stress levels were lower at NBP than where they lived previously. One interviewee summed up: *“Less stress, no commute, more peace because I have such good neighbors in North Beach Place.”* Additionally, maintenance requests are addressed in a timely manner so issues that could exacerbate health conditions are avoided. Further, informants felt that their health improved because they had many options to eat healthily and be physically active (see *Health Eating Active Living* section). Lastly, it is interesting to note that, in response to our first question prompting informants to describe what they thought a person needed to live a healthy life (employment, exercise, clean environment, healthy food, health care), respondents often said that North Beach Place provided the resources they listed. One resident even said, *“Living here is good for my health.”*

VIEWS ON REDEVELOPMENT

Overall, residents were very pleased with the redevelopment. Although one key informant wished that they had built in two phases to minimize displacement as originally promised, all key informants agreed that the overall result was positive. The redeveloped North Beach Place is cleaner, more sanitary (no rodents, roaches, better plumbing, clean water), and safer. *“Before it was “The Projects”, shooting and all that. After, crime rate went down. The apartments improved, the doors are more tight, the windows are steel. Everything is brand new. There are no rats, roaches. We have clean garbage cans.”* According to one key informant who had lived there both before and after redevelopment, *“there is less stigma associated with living here”* because of the decrease in crime. Another interviewee said *“now it’s peaceful and calm.”* The things key informants did not like about redevelopment are that the rooms are smaller, the communal areas are too small, and the walls were built a little too thin. One key informant who did not live in North Beach Place before redevelopment but heard from others said that the strict environment can sometimes make it feel as though people are not sticking together – that they tattle on each other. Several others, however, mentioned that they really like their neighbors. Overall, redevelopment was a positive change, *“I didn’t want to move, I didn’t want redevelopment... But now if you ask me, I am really glad they redeveloped, it’s nicer in many ways”* Another said, *“It’s cleaner now, it’s safer, it’s a*

better environment for children. I didn't know that this stuff bothered me that much, but now that it's changed, it's so much better."

MAINTENANCE SERVICES

There was unanimous opinion that maintenance service is very timely, responsive, and successful at fixing things; people have almost no complaints about maintenance services. The most common thing people mentioned needing attention is light bulbs that blow out, and the only complaint is that people cannot buy their own and fix them, they have to go through maintenance and pay for more expensive light bulbs through the management. People who had lived in other public housing developments or had lived at NBP before the current management company especially noticed the prompt and efficient maintenance services; one person went so far as to call the responsive maintenance services *"one of the best things about redevelopment"*.

Residents also mentioned the yearly inspections. Mostly, residents do not mind the inspections and it gives them a chance to make sure everything was in order. One person resented the intrusion into their private life.

AFFORDABILITY

North Beach place requires residents to pay 30-35% of their income, plus utilities. The three informants who mentioned affordability felt that they were getting a good deal for what they paid. *"I'm much better off than if I was trying to just rent a place in SF."* Another key informant said that renting in Chinatown might be a little bit cheaper, but the amenities made paying more at North Beach Place worthwhile. One woman she was glad that she only had to pay 30% of salary and not more; however, she was also worried that if she were evicted, she would not be able to afford to take care of her family.

II. DISPLACEMENT

Displacement during the redevelopment occurred because the original promise to build in two phases was not carried out. Residents were supposed to move into one side of the complex while the other side was being built. This did not occur, however, and residents had to move away. The key informants who were there before redevelopment did not appreciate having to move away. The movers who helped people transition to their temporary homes during redevelopment were excellent, according to one key informant. People were only allowed to come back if they were in good standing before they left. Some did not come back because *"they got Section 8 and they liked it better."*

A little under half of the key informants specifically mentioned having jobs that were close to North Beach Place. Displacement during the redevelopment affected the residents who mentioned having employment because they had to take long bus routes from their new places of residence to their jobs which were still near North Beach place, some even as far away as Potrero. These residents reported having much less stress once they moved back because the commute time was lessened by an hour or more each leg of the journey.

III. PUBLIC PARTICIPATION AND SOCIAL COHESION

RELATIONSHIP WITH MANAGEMENT

Quotes about the rules and strictness of management were the most numerous comments that residents had in the key informant interviews.

Examples of behaviors receiving citations by interviewees included: leaving a paper coffee cup on top of a garbage can instead of in it; leaving a mark on the sidewalk due to a leaking garbage bag; losing a key; and loitering.

Other rules that were mentioned included: riding anything with wheels in the common space; having barbecues; walking on the grass; playing with balls; going out of your house with your pajamas on; as one person

said, *"They have a rule book about an inch thick."* One person said, *"It's so strict that it doesn't feel like home,"* pointing to a negative impact of the rules.

As stated in the Crime & Safety summary, people uniformly understood the need for rules. *"I know people need rules in order to keep things stable, I understand. With no rules, things are unorganized."* This same person said, *"But too many rules can be annoying."* People also mentioned ideas why there are strict rules: to keep order for the tourists in the area, and because the housing complex is mixed income.

The most common thing people said they would change, when asked, is that the rules be relaxed a bit. While people value the safety and order that come with the rules, they also resent the extreme strictness of the rules. Some mentioned that the strict rules kept children from playing outside, and several younger people interviewed confirmed that they just stay inside.

Residents are very aware of the security cameras. Many felt like they have grown used to them and *"don't even notice them anymore"*, but every single person mentioned them. One person also mentioned feeling a loss of freedom because the gates do not allow ease of coming and going.

In terms of health, the rules increase personal and community safety, and ease the stress of worrying about crime. On the negative side, however, the rules decrease the physical activity that children could get playing in the common space, decrease the opportunities for social cohesion that common spaces and community uses such as community barbecues might offer, and increase the stress of concern about eviction.

SOCIAL COHESION/EXCLUSION/TENSION

Residents related stories of good relations with their neighbors, stating that they say hello, water plants for others, one person had their wallet returned to them when they lost it, and some mentioned appreciating that neighbors are respectful and not noisy. The picture presented was not one of a cohesive community, more one where people superficially get along well, but, as one person said, *"There is not a lot of neighbor interaction"*. While many know their neighbors' faces, they do not interact socially with neighbors. When describing their friendships, most people satisfy their social needs by going to other parts of San Francisco where they have friends or family, or inviting those to come to NBP. Some of this may be because there are not inviting community spaces due to the rules, some may be because new residents have their social networks from when they lived elsewhere, one person even hypothesized that people were cautious about interactions because of concern about *"snitching"*, or others giving information to management about their lives. The exception is the Chinese community at NBP, which seems to take advantage of the senior luncheons and the food pantry, and has those opportunities for community-making.

Several people stated that where they had lived before, everyone knew each other, even if there was more crime. *"At the place I lived before, everyone was very connected. If I was late at work my kids could go to other people's apartments, we all knew we would take care of each other. There was more of a sense of community there, but not as many amenities as here."* One person also mentioned potential social exclusion in terms of income, because of the mixed income nature of housing at NBP.

With regard to race relations, there was general consensus that NBP is very racially diverse, with Chinese, African American, Latino, Russian, Arabic, and others. However, many said that there was not a lot of integration of races, either; that people were social with their ethnic groups. Most people did not feel that there was a big issue with race relations, however a couple of people mentioned they thought there was *"racial tension"*.

Several people gave examples of how there might be subtle racism against African Americans: one by having management distrust her regarding her application to come to NBP, and others by feeling that security and rules were slightly biased against African American young males.

RESIDENT PARTICIPATION

People in general did not have a lot to say about resident participation in the process of decision-making around redevelopment. By several accounts, there have not currently been a lot of tenant meetings, and the ones they have are arranged by management. One person said, *"I went to a couple of tenant's association meetings. The problem is in many of the public housing projects, the tenant's associations, even though they have tenants on them, they're controlled by management. So, they are organized by management, and sometimes the tenants may get rewarded for going along with what management says. So you have to have tenant's associations that are*

unaffiliated with management, so they feel comfortable saying what they want. I would say, though, in my experience the tenants on our tenant's association seemed sincerely interested in hearing what people had to say. Where it went after that I don't know." One person noted that residents had asked to have a two-phase development project but builders went ahead and did it all in one phase, which she felt ended up displacing her temporarily.

IV. OPPORTUNITIES FOR HEALTHY EATING AND ACTIVE LIVING

Key informants reported multiple ways to access affordable, fresh produce. *"We do have a food bank here...the lines on Wednesdays are always around the block...also Chinatown is just 6 blocks away and there is fresh produce for good prices there."* Additionally, residents also have convenient access to full-scale grocery stores: *"there's a Trader Joe's and a Safeway here, so it's easy to get good healthy food."* The teen center provides cooking classes where teens can learn to prepare healthy meals. The majority of interviewees wished that outdoor grilling and barbecuing were permitted in the outdoor common areas.

Additionally, the common spaces cannot be used for active play. *"Where we live, kids cannot play with balls or ride their bikes."* The rules *"say no biking, no roller skating, no ball playing, no playing catch."* The playground is not public and thus not everyone can use it and, with so many rules and restrictions, it is almost as if *"they are not built with kids in mind."* There are parks nearby, but *"If teens go to the park, they get into altercations with other kids in the neighborhood and get kicked out"*. Thus, the teen center, which offers dance classes and other activities, becomes a valuable place where younger residents can be physically active. The consensus, however, is that residents wished that there were more resources for younger kids and extended hours of operation. Beyond walking, and using the stairs, residents generally tended to look to the surrounding neighborhood for opportunities to be physically active. Luckily there seem to be a wide array of opportunities to be active (a swimming pool, basketball court, gyms with both paid and free access).

Key informants also reported a large quantity of attractive destinations (parks, playgrounds, pier, coffee shops) as well as important resources (grocery store, food pantry, schools, jobs) within walking distance or easily accessible by public transportation. Proximity to these activity centers encourages walking. *"Living here is more convenient – you are in walking distance to things to see, to Safeway. You don't need MUNI."* Interviewees also repeatedly spoke of the access to high quality and convenient transportation, which can encourage walking, a form of physical activity. Additionally, multiple interviewees reported that they felt safer in North Beach than where they previously lived. Little to no community violence in the neighborhood means people feel safe walk to and from work and school, which increases physical activity.

V. CRIME AND SAFETY

Overall, residents felt strongly that North Beach Place was much safer from crime than it had been before redevelopment (if they knew the development before) or simply a safer place than other public housing developments they had lived in. Many people stated that this is why they moved to NBP.

Some felt there is *"no community violence in this neighborhood"*, mostly people simply felt that it was much safer. There were several people who stated that violence and crime still occur, but at a much lower level. One woman gave the example of her son working at a restaurant on the wharf, and that she felt she was safe walking a couple of blocks home at 1 a.m. from the restaurant.

Residents stated that a health benefit from living in a safer neighborhood was a decrease in stress, and an increase in *"peacefulness"*. Many said that it's a *"better environment for children"*, *"people act better now"*. Several mentioned that there are not shootings, which decreases injury.

Many residents talked about the rules that the current management puts in place, and while most felt that the rules and surveillance were somewhat excessive, most also were willing to live with them (and camera surveillance) because they feel it makes NBP a safer place. A couple of people pointed out that the gated feature of NBP is not necessarily always working, as sometimes people prop the gate open or it is not working. An extension of the rules that one person mentioned as making the place safer is that management did not allow people who are more *"colorful"* to return.

A final point that was mentioned several times in relation to safety is that teens have a place to go to *"stay out of trouble"* and to learn better habits than *"hanging around"*.

VI. PROGRAMMING AND SERVICES

According to residents, there are many programs and services in surrounding neighborhood including: after school programs, a Boys and Girls club, and free indoor and outdoor gyms nearby. When discussing the programs and services offered by North Beach place, they mentioned the food pantry, the community center, and the teen center. The weekly food pantry is well established and very well utilized (see *Health Eating Active Living* Section). The community center houses the food pantry, and also is a space people can use for social gatherings and weekly meetings.

The teen center offers a variety of programs and services to the teens of North Beach place, including: computer, video game, and internet access, an after school homework program, various cooking, dancing, and multi-media classes, movie nights, birthday celebrations, and parties. According to one key informant who used the center when he was younger, *"The Teen Center is...a good place to hang out rather than get in trouble outside."* Another interviewee said, *"If you're looking for a job, the teen center is a good place to go because you can use the internet and the computers there, and ask staff for help."*

Several key informants felt the teen center was under-utilized. One key informant shared that this might be because it had the reputation of being a place where the *"reckless"* kids would go. She felt that there needed to be *"more structure, rules, and discipline."* Another key informant suggested that the center could be used to offer more activities to *"get [teens] thinking and not merely just a place to hang out and get kids off the street."* Others suggested: more activities in languages other than just English and Chinese, more field trips, more coordination to get teens to participate in volunteer activities. Since, according to the key informants, the outdoor common areas and play grounds are not very child-friendly (see *Health Eating Active Living* Section), several interviewees expressed interest in having more activities for younger kids, not just teens. Additionally, they wished the center would extend hours and open on weekends.

VII. MANAGEMENT'S PERSPECTIVE

After redevelopment North Beach Place transitioned from being managed by the Housing Authority to being managed by a private company, The John Stewart Company. The management company is responsible to both the Housing Authority and to Housing and Urban Development (HUD). It must ensure that the property is managed within budget, and must comply with regular HUD audits that ensure that those living at the complex are qualified. It must also deal with residents' complaints and security issues.

Interview with a management representative revealed that they indeed have an extensive screening process for residents. First, The John Stewart Company does a credit check and a person is automatically denied if they have \$2500 or more in collection, over 7 accounts, or declared bankruptcy within the past 3 years. After passing the credit check, the individual's application is reviewed and verified (income, employment, assets, criminal background and sex offender check). In regards to tolerance for past criminal offenses management stated, it depends on what the person did and goes on a case by case basis. However, there is a zero tolerance policy for possession or sale of drugs and for any sex offenses.

Management explained the need for rules. The manager said that rules are needed to keep apartments in safe and sanitary condition. Residents must keep their children from playing with balls or riding bikes in the common open space areas (or anywhere for that matter) in order to avoid breaking windows, obstructing people's ability to walk around, or unintentionally hurting someone. There must be no dangerous activity taking place in the apartments. The person who lives in the apartment will be held accountable for any behavior that takes place in it. For example, if a resident has friends visiting and they start a fight, the resident will be held responsible. Residents may not smoke in common areas, only in their apartments. If a resident does something minor the resident will get a written warning, but if something bigger and more major happens, the resident is at risk for eviction.

There is a formal eviction process. After a resident receives multiple warning letters, he will then get a 10-day warning letter. If the resident does “it” again, the resident’s file goes to an attorney and goes into a settlement agreement, which essentially means that if the resident does anything wrong again then eviction begins. The manager said that they take eviction seriously, but they understand how devastating it is for residents when they are evicted. She said that she works with residents as much as possible to avoid eviction. She also mentioned that if someone is being too loud or if their kids are playing outside, etc., she often avoids giving people a written warning (which makes the complaint official) and instead gives them a verbal warning. She would like to work with residents as much as possible to avoid evicting them.

The manager felt that her relationship with residents was “*really good*”. Though she acknowledged that with thousands of residents, there are some challenges that come up from time to time. Most residents need something fixed in their apartments so they submit work orders. Work orders have a 48 hour policy – the problem must be fixed within that timeframe or she must give the resident a status update. From the manager’s perspective, she felt that there is wide open communication between the residents and The John Stewart Company – if a resident needs something they can always reach someone in the office to help them, or if it is after hours and there are security problems, there is a security service they can call to help deal with the problem.

Regarding displacement, the manager stated that previous residents indeed were relocated elsewhere during redevelopment, but when the property reopened the relocates were the first to move back in. She also stated that relocates did not have to go through the normal screening process – for instance, no credit check was required. As long as individuals had not committed a “*heinous*” crime then they would be admitted back into North Beach Place. Though, she also stated that some people took rental vouchers and did not return. Still she said that out of 229 families, 82 decided to come back “*which was very high return rate*”. People may have also got comfortable living in their new communities, which prevented them from coming back to North Beach Place. Perhaps older residents didn’t want to have to deal with moving again. And, people with children didn’t want to move again because their kids were getting settled in school. Some residents didn’t want to move back because NBP was so dangerous before the redevelopment and they were worried it would be the same way again. However, once they saw the new development, she said they decided to come back.

When asked what role management plays in the health of its residents, the manager said there is a senior social every month in the senior building, and most times there is a speaker that comes to talk to the residents about different subjects like nutrition. Management also recognized the importance of environmental health issues. “*If a family has a hard time keeping their house clean then John Stewart will coach them through cleaning and maintaining their apartment and talk to them about the consequences of having a dirty living space (i.e. roaches can spread to other apartments and can carry disease).*”

Management also commented on the importance of social services. “*It gives people things to do. It provides people with help to get jobs (job binders, rec center has computers where they can get help with their resumes). The food pantry helps people with food costs.*” Management felt that there were many programs at North Beach Place. “*They have children and adult programs. The programs for children are run mostly through TELHI since there is a contract with them – some of the things they do with the children/teens are field trips to the zoo, empowerment workshops, hip hop dance classes.*” Management organizes workshops for the adults that address issues like money management, home buyer workshops, how to sign up for affordable health care, ESL classes, GED classes. Management also organizes holiday parties for the residents. Management also mentioned that the tenants’ association meetings are the forum for many of the adult workshops, but that the tenants’ association “*isn’t very good. They fought a lot and haven’t had a meeting in a year and half.*” So, the manager has been organizing the meetings as often as she can in the meantime. Apparently, the Housing Authority is in the process of getting the tenants association up and running again.

In terms of moving forward and improving the health of residents, the manager said that “*open communication between residents and management is key*”. “*Trust is very important between management and residents because people will start rumors.*” Examples of rumors included “*how management is too strict and will evict you if you do anything wrong, or rumors that there was someone who was stabbed 36 times in the building and so the building is unsafe.*”

Appendix D: Interviews with those in the Neighborhood

Perspectives on Redevelopment and Health Bernal Dwellings and North Beach Place Surrounding Neighborhood Key Informant Interviews

The HOPE VI Program was developed as a result of recommendations by National Commission on Severely Distressed Public Housing, which was charged with proposing a National Action Plan to eradicate severely distressed public housing. The Commission recommended revitalization in three general areas: physical improvements, management improvements, and social and community services to address resident needs.³

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The following document is a summary of results from key informant interviews regarding how the redevelopment in 2004 of North Beach Place, a housing project in San Francisco, CA, affected the health of residents. These results will eventually be combined with all other data in the form of a full Health Impact Assessment report, which will include recommendations to mitigate negative health impacts (to be available at <http://ehs.sph.berkeley.edu/hia>).

Key informants included workers at nearby businesses and people on the street in the neighborhood surrounding both Bernal Dwellings and North Beach Place. Statements that pertain to particular sites are mentioned below.

Generally, everyone interviewed agreed that redevelopment improved the community. But, interviewees still reported varying levels of concern about crime and safety. However, there were differences in the way some community members and businesses viewed the housing projects and their residents.

³ HUD. What is HOPE VI? US Dept. of Housing and Urban Development. Available at <http://www.hud.gov/offices/pih/programs/ph/hope6/>. Accessed on July 2, 2009

Most community members, especially those who had moved to the neighborhood after redevelopment, viewed the housing projects positively and reported no big problems. But depending on their experiences and the duration in which they lived in the community, some viewed the public housing sites as dangerous areas.

Some new or recent residents to the community did not even know that there were public housing nearby. For instance, a young man that had lived very close to North Beach Place for 1.5 years and regularly used the Tel-Hi basketball recreational facility, said *"I didn't even know we had Housing Projects nearby."* When asked about crime he said, *"I don't see any crime difference than my last neighborhood."* Another local shopper that had lived in the North Beach community for 2 years stated, *"I didn't know there was public housing around here."* Another shopper who had lived in the same area for 4 years stated *"they don't really seem to have an impact on the community."* When questioned about the crime in the area he stated, *"Crime is about the same as where I've lived before,"* and when asked about any interactions with public housing residents he said, *"I mainly only see kids interacting with each other but not much of the rest of the people that live there."*

A similar trend was found at in the neighborhood surrounding Bernal Dwellings, but a few comments were somewhat less positive. Some residents stated, *"Things are good there are no problems...[it's] the same as other places,"* while another resident stated, *"They tend to stay to themselves and don't seem very friendly."* Furthermore, the same resident stated, *"I feel like I'm stared at when I pass by, as if I'm invading their territory."*

The interviews further revealed that many of the local shoppers and residents never had direct interactions with the public housing residents and felt neutral about their presence, which may suggest that either the public housing community is so well integrated into the rest of their community that they are barely noticed or differentiated from their neighbors, or that public housing residents keep to themselves and are actually not integrated in the community at all.

Unlike recent residents, residents who had lived in the areas before the public housing redevelopment had a lot more to say. Their comments were both positive and negative. One local Bernal resident of 4 years stated, *"they cause a lot of problems and they used to make a lot of noise, but now not as much."* Another resident of 19 years stated, *"It's a lot better now; the streets are cleaner there...Before there was a lot of drug trafficking, vandalism, and murders, but now it has been a while since anything has happened...there's more neighborhood interaction than before, but not as much with people from the public housing...there seems to be more crime in the dwellings; sometimes I hear shots coming from there."* Although this community resident confirmed the improvements that occurred after redevelopment, crime was still thought to be more frequent in the public housing area. In contrast, another resident near the Bernal Dwellings blamed other locals for the crime. This resident insisted, *"There was a shooting around 2 weeks ago, but it's likely it was one of the Mexicans from 24th street"* and when speaking about crime from the public housing area he said, *"There's no more organized crime... People are now more well mixed in race than before...[yet] I don't think anything can be done to make it better. It's as best as could be."*

North Beach Place also garnered mixed reactions from nearby community members. In a local café nearby the North Beach dwellings, an employee stated that she noticed that *"There's mostly African Americans in the housing... 2 laptops were stolen, one from this café and another from a business nearby; it was an African American and it's suspected they're from the projects... [yet] they mostly stay in their area."* Similarly, crime was mainly attributed to the public housing dwellers throughout the rest of the nearby businesses. After being asked about his views on the public housing resident's impact on the community and his business, an employee stated, *"They have a questionable impact on our community... employees don't feel very secure... they tend to separate themselves from the community... don't care about the environment (tourists)."* Furthermore, as two African American males walked out of the store he commented, *"They steal every day...those two guys that just walked out, they probably just stole something."* However, he revealed, *"There was less crime [than ever] during construction, but there's less crime after the redevelopment than before."* Another employee, a security guard for 16 years, confirmed this statement with, *"things are a lot better and quieter now, probably because of the redevelopment and management here...[now] There's mostly only stealing and breaking and entering...In the past there was more violent crime, I even had to use my baton on someone stealing from Safeway and once someone I arrested was"*

even wanted for murder in Texas...[also]A couple of years ago there was a shooting at Denny's and a couple of months ago dead bodies were found at Fisherman's Wharf, but those types of stories are mostly kept on the down low." He also added, "I don't blame just the projects for the crime. Bad people don't just come from the Projects, they come from everywhere, such as the apartments nearby." Other employees also agreed and said, "It's not all of them that are criminals; it's mostly the same people over and over again, not everyone in the projects in general." However, other employees were downright certain that public housing residents were the main source of the crime. One security guard even exclaimed, "Demolish them!...They're bad for business!... They steal everyday!"

There were some that considered public housing residents as important to local business. The Trader Joe's at the corner of North Beach Place had no trouble whatsoever with their neighbors, and the Bernal Dwellings local businesses right around the corner affirmed, *"Business is good; a lot of it comes from the people that live in the housing projects...Most adults are friendly and like to hang out by the store... [only] Some teens and young kids are troublemakers."*

Perspectives on Redevelopment and Health Equity Community Partners Key Informant Interview

The HOPE VI Program was developed as a result of recommendations by National Commission on Severely Distressed Public Housing, which was charged with proposing a National Action Plan to eradicate severely distressed public housing. The Commission recommended revitalization in three general areas: physical improvements, management improvements, and social and community services to address resident needs.⁴

In 1992 the U.S. Department of Housing and Urban Development (HUD) initiated a \$5 billion public housing redevelopment project called Housing Opportunities for People Everywhere (HOPE VI). Poor quality public housing can have multiple negative impacts on health, from environmental hazards leading to respiratory disease and injury to social hazards leading to crime and violence. Alternately, high quality public housing has the opportunity to decrease stress associated with affordability, crime, and social exclusion. With HOPE VI, public housing redevelopment (PHR) had an opportunity to address health concerns by redesigning and rebuilding the physical structures in housing sites as well as instituting policies to improve residents' health.

The University of California, Berkeley School of Public Health, the non-profit Human Impact Partners (HIP), and the San Francisco Department of Public Health are currently conducting a retrospective Health Impact Assessment (HIA) of HOPE VI redeveloped sites. This assessment was conducted in cooperation with the on-site community centers that serve residents of the public housing sites. HIA is a process used to evaluate how a proposed policy, plan, or project impacts the health of a population. By conducting a retrospective HIA, we hope to understand how redevelopment may have impacted residents' health in two HOPE VI redeveloped housing projects (Bernal Dwellings and North Beach Place) in San Francisco. Additionally, the research will offer recommendations to the new HOPE SF effort as public housing sites are redeveloped in the near future.

This HIA utilized a combination of primary and secondary data sources and qualitative and quantitative research methods to be able to judge health impacts of redevelopment of public housing. These techniques include scientific literature review of the connections of public housing and health; secondary data collection of statistics about demographics, health outcomes, access to various goods and services, and utilization; and resident opinions and behaviors data collection such as surveys and interviews.

The following document is a summary of results from a key informant interview regarding background on the HOPE VI redevelopment process in San Francisco. These results will eventually be combined with all other data in the form of a full Health Impact Assessment report, which will include recommendations to mitigate negative health impacts (to be available at <http://ehs.sph.berkeley.edu/hia>).

⁴ HUD. What is HOPE VI? US Dept. of Housing and Urban Development. Available at <http://www.hud.gov/offices/pih/programs/ph/hope6/>. Accessed on July 2, 2009

We interviewed a stakeholder at Equity Community Partners, who has a long history of working on affordable housing projects in the Bay Area to get his insight into the history of HOPE VI redevelopment in San Francisco. The informant first began working at Bridge Housing in 1983, where he began his work with affordable housing and stayed through 1995. In 2001, Bridge Housing approached him to see if he would be able to do the project management for North Beach Place (NBP) because the other Project Manager left. The NBP redevelopment was led by a 3 party partnership: John Stewart, Michael Johnson, and Bridge Housing - which were selected by the Housing Authority (HA) and the residents. He is mainly familiar with specifics of HOPE VI for NBP and was involved from 2001 through to the completion in 2004, though he is also familiar with the Valencia Gardens redevelopment.

The informant created an executive, core team from the three partner agencies that met regularly during the planning and developing of NBP. He worked closely with the new (as of 2001) Housing Authority Director, Greg Fortner, to deal with the issue of relocation of residents after it was decided that the redevelopment would be in one phase opposed to two phases (because it would be more cost efficient and easier to obtain subsidies if the development took place all at once). He said he played a big role in trying to regain the trust of the residents and to help facilitate the relocation process.

He recounted some of the history of NBP. There were a lot of good things about the old projects:

- There was a lively sense of community
- Multi-cultural
- There were residents that had lived there for 40+ years
- There was strong resident leadership (albeit, it wasn't very diverse)
- Strong sense of place
- Older residents had "status" and were respected
- Daycare center onsite run by Head Start (Ki Ming) and the residents were able to work there (a larger daycare center was rebuilt during the redevelopment and Ki Ming still runs the program)

But, problems also were present that related to:

- Safety
- Sanitation
- Indoor air quality
- Units were small (although not much bigger in the new development),
- Less sense of certainty about housing rules

According to the informant, there was active participation in the redevelopment process. The players included the Mayor's Office of Housing, the Housing Authority, Bridge House, John Stewart, Michael Johnson, community advocates (Telegraph Neighborhood, Chinatown CDC, Asian Law Caucus, Head Start Kai Ming), and residents. There were also 5 committees that residents could join to learn more about the redevelopment process (the interviewee could remember 4 out of 5):

- Design committee
- Financing committee
- Relocation committee
- Incubator space committee (where residents could learn about opportunities to start their own businesses)

He worked hard to integrate the residents into the redevelopment process. He met with the 5 residents (the elected leadership of the Tenants Association) on a weekly basis for a year to discuss any questions they had about the redevelopment process. He wanted and needed the resident support for the design and implementation of the redevelopment. As well, he knew that trust building needed to happen because residents were upset that the redevelopment would now happen in one phase versus two phases.

Most of the conversations and concerns from residents were about the relocation process/plan and how they would be treated in the two years it would take to rebuild NBP. They were also worried about their right to come back to NBP after it was redeveloped. During the first year of planning the redevelopment of NBP, he led the relocation conversations and eventually rewrote the entire relocation plan in conjunction with the residents and

Legal Aid and the Asian Law Caucus (the residents' lawyers). Even though the trust around relocation was mainly an issue between the HA and residents, he asked two local agencies if they could be available for residents if they needed a place to vet their concerns about the relocation. The two organizations were Telegraph Hill Neighborhood Center and Chinatown Redevelopment Association. But, as far as he knew, no one actually used this service. Also, two residents were hired as advocates for the residents around the relocation. They were able to answer questions about the relocation and be available for support. After relocation, the two residents were resident hiring coordinators responsible for hiring residents for jobs.

Regarding the design of the new buildings, he said that residents were very clued in to the design of the buildings and were very supportive of the new design. It made sense to them. There was also a fair bit of education that occurred with the residents about discussing the old design and the new design and the positive impacts the new design would have, i.e., improving personal safety.

Improving personal safety was a major design goal. This included having a secure perimeter with a limited number of entry points, front door and sense of entry into every unit, so people would feel they had a front door/ownership/personal safety, and breaking up open space in smaller elements so residents could acknowledge and keep an eye on who belonged at the housing site and who did not.

Other design goals included rebuilding at a higher density to achieve greater economic diversity, involving residents in planning and development, providing residents with employment opportunities – the goal was to have 25% of construction hours worked by the residents; ended up with 22%, and provide job training to residents – people learned how to do asbestos removal, helped people join labor unions, and hired a service coordinator to help connect residents with existing social services in the community.

According to the informant, health played a role in redevelopment. Aside from defensible space design, for example, there were discussions with residents about the materials used in the redevelopment process. There were also discussions about indoor air quality. There was also a lot of talk about nutrition, which was triggered by people bringing in very unhealthy food to the weekly meetings. He was concerned about how unhealthy the food was, and this started dialog about nutrition with residents. From this conversation, he decided to put a kitchen – a kind of kitchen that you would find in a restaurant – in the community room.

Yet, there were challenges in the redevelopment process. He recounted that it was hard to get things approved in NB, but there was support from the community to change things. Constructive feedback was provided about what needed to be different with the redevelopment – the buildings and the management needed to be overhauled. Again, relocation was a big issue as well as concerns about being allowed back to NBP after redevelopment was complete. Moreover, an effort was made to prep residents about what the new environment would be like, particularly in terms of new and possibly stricter expectations about things like rent, throwing your trash away in the proper place, etc. But, he felt that no matter how much this change was discussed, it didn't prepare residents enough. Indeed the one thing he mentioned about the health of current residents was that they may have more stress because of stricter housing rules.

The informant also recounted that of the 5 to 6 residents that he worked with closely, he thinks that they went and lived in Section 8 housing as opposed to coming back to NBP after it was redeveloped. His impression was that there were a lot of people that didn't like the idea of dealing with a private landlord because it would be a very different living experience than what they were used to. Though he's not sure, he believes that there were lowered requirements for relocated people to return to the NBP after redevelopment. While new residents had to go through extensive background and financial screening before being accepted into NBP, returning residents did not have to go through a credit check and if they did not have a felony and were in good standing with their rent they would be allowed back.

He stated that there were quite a few positives to the HOPE VI redevelopment. The redevelopment resulted in deconcentrating poverty. And, it provided excellent access to safe, good quality, and affordable housing. *“Physically the buildings are in much better condition, there is better open space, more amenities. Went from an F to an A”.*

He worked on Valencia Gardens and NBP and commented that they are very different in some ways but he felt that both projects were very successful. Clearly some issues still exist at both these sites, like drug dealing, but there is a better ability and system for dealing with it. Residents that could not handle the improvements at the sites have left, but he said that Housing Authority should know more about what's happened to people who have gone.

With regard to the new HOPE SF process, he said that he is “very involved”. At Potrero, he is the community organizer, and at Hunter’s View, he is dealing with all the infrastructure issues. He said that the major differences thus far are:

- There is a much broader mandate under HOPE SF
- The city is mobilizing resources on the human capital side of things and working toward universal return
- HOPE VI provided good housing, but was disruptive to residents
- HOPE SF is attempting to start a lot of programs in conjunction with the redevelopments – like having neighborhood schools in order to deal with the issue of kids being moved around during construction

He said that much is trying to be accomplished under HOPE SF and it is a very formative, critical time right now. *“There is no model for what is being attempted and will be interesting to see what actually gets done.”*

