

29th St. / San Pedro St. Area Health Impact Assessment

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Human Impact Partners

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Los Angeles Association of Community
Organizations for Reform Now

www.acorn.org



Contributors

The Human Impact Partners' project team was led by Jonathan Heller, Jennifer Lucky and Won Kim Cook, and included support from Peter Cohen and Jose Melendez.

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Human Impact Partners (HIP) conducted the Health Impact Assessment (HIA) for *The Crossings at 29th Street Development* at the request of, and in collaboration with, Los Angeles ACORN. We thank our partners at ACORN, especially Peter Kuhns and Martha Sanchez, for their input and feedback during this process. We would also like to acknowledge and thank Merilee Langdon and others at Urban Housing Communities, as well as Paul Simon and staff at the Los Angeles County Public Health Department for their contributions of time and information for this report. We thank the 29th Street neighborhood residents who completed the community survey used in this assessment. Several other organizations contributed data and pointed us to resources as well. A special thank you to The California Endowment for funding this work.

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Correspondence

Please direct correspondence about 29th St./ San Pedro St. Area Health Impact Assessment to Jennifer Lucky at jlucky@humanimpact.org or Jonathan Heller at jch@humanimpact.org.

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29th St. / San Pedro St. Area Health Impact Assessment Introduction

This report presents the results of a Health Impact Assessment evaluating the plans to build *The Crossings at 29th Street (The Crossings)*, a five-phase, 11.57 acre development including more than 450 units of affordable housing, and services for low income families; and providing community recommendations for improving health through redevelopment policy in the 29th St. / San Pedro St. area. *The Crossings* is designed to be built in a four-block area next to a residential community and an elementary school in South Los Angeles. The area is currently in the process of being rezoned from industrial to residential. Los Angeles ACORN (Associations of Community Organizations for Reform Now), a local community based organization, worked in collaboration with Urban Housing Communities (UHC), a housing developer, on the proposal and site plan for *The Crossings*. Both UHC and ACORN expressed their interest in developing *The Crossings* in a way that will address local community needs for affordable housing and for other community assets that are safe, healthy and supportive. The area surrounding *The Crossings*' project site is home to a growing population of mostly low- and very low-income families with children where overcrowding, substandard housing and lack of access to transportation and healthy food are serious health concerns for the community. As such, this project has the potential to bring many health benefits to the local population and the surrounding community.

Health Impact Assessment (HIA) describes a process to inform policy-makers about how policies, plans, programs, or projects can affect the health of populations. HIA is increasingly being used both nationally and internationally. By using diverse research methods and tools, HIA considers environmental, social and economic determinants of health. HIA also adds a focus on environmental justice implications and potentially beneficial and/or negative effects of project and policy proposals. In order to help reduce health disparities, HIA is used to constructively and proactively suggest mitigations for unintended negative health effects of project, program or policy proposals being evaluated.

The goal of this HIA is to ensure that health impacts are considered in the design and development of *The Crossings at 29th Street*, and in the broader policies impacting redevelopment in the area. In this report we present findings of our impact analysis and make recommendations about health-promoting mitigations that have the potential to optimize public health opportunities within the development project. This HIA was conducted by Human Impact Partners (HIP - a non-profit organization specializing in HIA) in collaboration with Los Angeles ACORN, and with the support of Urban Housing Communities as well as other local agencies and organizations in Los Angeles County. Funding for this HIA came from The California Endowment.

Background

For more than fifty years, Palace Plating, a chrome electroplating facility, has been in operation just five yards from the 28th Street Elementary School in South Los Angeles. Polluting emissions released from this site include hexavalent chromium (chromium 6), which is a known carcinogen, and other hazardous waste products that have been illegally disposed of in the local vicinity. For more than five years members of ACORN along with other community stakeholders (including parents, students and teachers) have engaged in

efforts to remove Palace Plating and urge the city to consider rezoning this industrial area (which stretches from Broadway St. and Central Ave. to the West and East, and Washington and Jefferson Boulevards to the North and South). Los Angeles ACORN is dedicated to empowering lower income residents to transform their communities to become safer, healthier and more economically stable. ACORN has a successful track record of working with low-income residents to achieve land use and policy improvements in their communities.

This history of industrial operations in such close proximity to residential homes and community facilities in the neighborhood where *The Crossings* will be located illustrates how health disparities have emerged out of a combination of residential segregation, historic outmigration of affluent white residents and subsequent loss of resources from the community, and the lack of opportunity for community participation in land use planning.

In 2006, Urban Housing Communities entered into negotiations with Palace Plating over the sale of their property, and was able to secure control of four blocks of industrial property in the area. UHC also obtained a \$3.5 million preconstruction loan from the Los Angeles Community Redevelopment Agency (CRA/LA). Urban Housing Communities, an affordable housing development partner of Morgan Stanley, specializes in multi-family and senior housing facilities in California and Hawaii. UHC aims to build communities where residents enjoy activities, socialize and benefit from social programs such as health and wellness services, extended learning classes, job training, child-care centers, credit counseling, home buyer assistance programs, and other life-enhancing services. UHC collaborates with local community groups, government agencies, not-for-profit organizations, for-profit enterprises, investors and lenders that share a passion and/or need to engage and answer the call for affordable housing.

In 2008, the City Council of Los Angeles approved the processing of a General Plan amendment to allow re-zoning for residential use of the entire area bordered by San Pedro, Griffith, 29th Street, and 31st Street. Businesses currently located in the industrial buildings in this area will be assisted in relocating to more suitable area industrial sites in accordance with City, State and Federal regulations.



ACORN and UHC would ultimately like to see this mixed industrial/residential community transformed into a vibrant and healthy neighborhood for lower-income residents of Los Angeles, one that supports healthy families, as well as active and engaged community members. In 2007, after considering community input generated through an engagement process led by ACORN, UHC presented a five-phase site plan for *The Crossings*, to be completed over a seven-year period. Phase I, on the south side of East 29th Street between Griffith Avenue and San Pedro Street, is scheduled to break ground in Fall of 2009, and includes the following components:

- six three-story buildings consisting of 32 two-bedroom town homes and 14 three-bedroom apartments (each two-bedroom home will occupy 1,061 square feet of space, and three-bedroom units will be approximately 1,078 square feet). The standard multi-family apartments will include covered patio/balcony, central heat and air conditioning, dishwasher, refrigerator, range, garbage disposal and washer/dryer hookups;
- a gated entrance on 29th Street;
- a subterranean parking garage (two parking spaces per unit, plus handicap accessible parking);
- a 2,500 square foot community room with a computer lab, kitchen, laundry facilities, and an office for the on-site manager; and
- open spaces including picnic and barbeque areas.

UHC has expressed their commitment to ensuring that social and educational programs that meet community needs are provided on-site at *The Crossings*. Such programs potentially include: health screenings, childcare, GED and ESL classes, occupational certification courses, resume preparation and job referrals, financial counseling and other supportive services that would be provided onsite at no charge to residents.

UHC is working on the acquisition of surrounding area properties as well as refining their development plan for the remaining four-phases of *The Crossings* project. UHC is also in negotiations with the Community Redevelopment Agency in LA regarding funding sources from both within and outside of the city to support subsequent phases of development of *The Crossings* project. In March of 2009, The City of Los Angeles agreed to take responsibility for the cost of the environmental clean up of the area where Palace Plating is currently located.

HIA Methodology

A typical HIA involves five stages: screening, scoping, assessment, communication of results, and monitoring. The summary that follows provides key activities and findings for each stage in the HIA process for *The Crossings at 29th Street Development*.

Stage 1: Screening

Screening, the first step of HIA, involves establishing the feasibility and value of an HIA for a particular decision-making context.

The Crossings development will bring an additional 450 units of housing to a newly rezoned residential area in a community where there is a clear need for affordable housing. Due to the growing population of families with children, dilapidated housing conditions, prevalence of overcrowding, and lack of access to needed goods and services in the area where *The*

Crossings is proposed to be located, this project has potentially significant health implications for residents in the local and surrounding communities. Health was identified early on as a priority by a group of community residents (ACORN) that has been involved in efforts to transform the industrial areas of this neighborhood to uses that better meet community needs. The project developer, UHC, also expressed a commitment to ensuring that *The Crossings* be designed to meet existing community needs for affordable housing as well as community services. For these reasons, it was evident during the screening phase that an HIA would add value to project outcomes by identifying health assets, health liabilities, and health-promoting mitigations related to the development project proposal being considered. Given that resources were available and the timelines were appropriate, the decision to conduct an HIA was made.

Stage 2: Scoping

Scoping, the second stage of HIA, involves creating a work plan and timeline for conducting an HIA that includes priority issues, research questions and methods, and definition of participant roles.

In order to understand some of the health-related needs and concerns of the residents in the community where *The Crossings* is to be located, health statistics, results of a survey of nearly 300 community residents, and reports about existing neighborhood health conditions were reviewed. From these, HIP and ACORN drafted sets of research questions in each of the five following topic areas:

- Housing;
- Pedestrian Safety, Neighborhood Walkability and Public Transit;
- Health Services and Food Retail;
- Education; and
- Parks and Recreation Facilities.

Research questions are provided in each chapter of this report.

The budget for this Health Impact Assessment was limited and not all priority research questions could be addressed. Specifically:

- While there are obvious environmental health implications related to the industrial uses on and around the four block area where *The Crossings* will be located, HIP, ACORN and UHC decided during the scoping stage that chemical contamination of groundwater and soil from industrial sources would not be included in the HIA. We absolutely believe that these potential health concerns are important and are to be considered as additive effects to the other health impacts discussed in this report.
- The HIA also excludes comprehensive air quality and noise analyses. Air quality and noise issues were prevalent among the community's list of health-related concerns, and are discussed but not focused on in this HIA. These topics and their health impacts should be studied in depth as part of the EIR process.

Stage 3: Assessment

Assessment, the third stage of HIA, involves making judgments of a project or policy's health impacts based on available information. Information sources include available statistics, qualitative and quantitative research, expert opinion, and community experiences.

For this HIA, data regarding existing conditions relevant to the research questions was

collected from a number of sources, including the U.S. Census Bureau, The Los Angeles County Department of Public Health, the California Nutrition Network, reports from University of California Los Angeles and Occidental College, and the Trust for Public Land.

In addition, primary data was collected from the following sources:

- *Community Survey*

Together with ACORN and UHC, HIP designed a survey tool to assess health-related conditions of residents living in the vicinity of *The Crossings*. The 44 question survey, which was translated into Spanish, touched upon a variety of health topics, including housing, education, safety, and access to services, transportation, parks and nutritious food. LA ACORN administered these surveys to local residents at community meetings, to parents at the neighborhood school, in local faith-based congregations, and by visiting individual houses in the neighborhood. Results from a total of 264 completed community surveys were analyzed as part of this Health Impact Assessment. In addition to gathering data for the health analysis, LA ACORN used the survey tool as a way to increase awareness of and interest in *The Crossings* project development among local residents.

HIP analyzed the results of the surveys and, together with LA ACORN, prioritized the scope and research questions for the HIA based on the survey responses. Data from specific survey questions was used alongside Census and other data sources to provide additional information about existing health conditions in the community. A copy of the survey is contained in Appendix B.

- *Field observation*

In October, 2008, HIP staff visited South Los Angeles to observe the pedestrian environment and transportation features in the area surrounding *The Crossings*. The quality of roadway intersections for pedestrians was evaluated, as were public transit facilities.

Existing standards and guidelines, such as Healthy People 2010, California General Plan Guidelines, The City of Los Angeles' General Plan, The Los Angeles Metropolitan Transportation Authority's 2025 Regional Transportation Plan, among others, were also reviewed as part of this HIA. Using the information gathered during the Assessment stage, the composite site plan for *The Crossings* was analyzed to understand how this project, as designed, would impact health from the perspectives of the posed research questions.

Stage 4: Communication of HIA Findings and Recommendations

Communication, the fourth stage of HIA, involves delivering results of the health analysis to stakeholders through reports and presentations. This report provides documentation of the HIA research findings including background literature, existing conditions, research methods and findings, and recommendations. In addition to this full-length report, an executive summary of the HIA will also be made available in both English and Spanish. All of these documents are posted on HIP's website at www.humanimpact.org. Both the full-length report as well as the executive summary will be shared with stakeholder groups and decision-making bodies including: LA ACORN members and community residents who responded to the community survey used in this HIA, local non-profit affordable housing and service organizations, Urban Housing Communities, the Los Angeles County Department of Public Health, elected officials including the City Council of Los Angeles and the Mayor's

office, as well as other City Departments such as Planning and Housing.

Stage 5: Evaluation and Monitoring

Evaluation of the HIA process as well as the way in which the HIA ultimately impacts decision-making is an important part of Health Impact Assessment. Throughout the process of conducting the HIA, HIP and LA ACORN have continued to review the aims and objectives of the HIA. HIP will conduct an internal evaluation of the process of conducting this HIA.

In the context of HIA, monitoring refers to the process of evaluating the outcomes of decisions about the specified project or policy on health determinants, and, if possible, health status of a population. The long lead times between decisions and their implementation is a challenge to monitoring, as are the complex relationships among the built environment, environmental health and health outcomes. Monitoring may also entail “watchdog” duties, including, for example, observing whether or not the project decision-makers are instituting the types of mitigations and recommendations to which they agreed.

A plan for monitoring long-term development impacts on health has not yet been established for this HIA.

Report Format

The following chapters of this present respective HIA analyses for: Accessible and Quality Housing; Pedestrian Safety, Neighborhood Walkability and Public Transit; Education; Access to Food Retail and Health Services; and Parks and Recreation Facilities. Each chapter includes a summary of existing conditions related to the chapter topic, followed by an analysis of health impacts that could result from the development of *The Crossings* as designed, and a list of recommendations for health-promoting mitigations.

Limitations

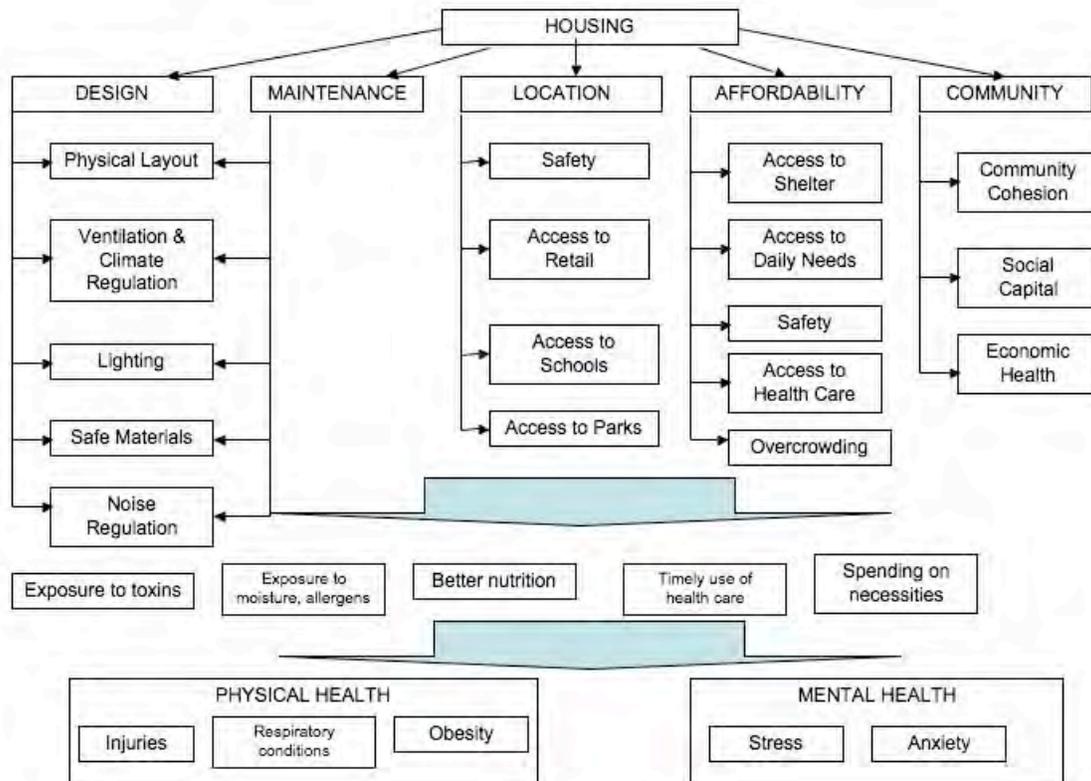
The findings and recommendations in this HIA report are made based upon available data, field observations, and our best professional judgment. It is possible that unforeseen events could occur that may limit the accuracy of this assessment.

29th St. / San Pedro St. Area Health Impact Assessment

Chapter 1: Housing

Health Pathways

This analysis of housing considers the ways in which The Crossings at 29th Street Development Project (“The Crossings”) could address the issues of housing affordability, overcrowding and housing conditions for local community residents. It identifies recommendations to ensure that the proposed housing is affordable, adequate in size/number of units, and provides quality living conditions for residents. The following pathway diagram depicts connections between housing and health.



A. Introduction

Housing can impact health in many ways, from how residences are built and maintained, where housing is located, and what percentage of one’s income is spent on rent/mortgage. Housing contributes to health not only by providing safe and affordable dwellings but also by creating access to jobs, schools, transportation and services, ensuring environmental quality, and facilitating social interaction. This section considers the relationship between housing and human health, and how The Crossings will affect these relationships. The following questions relating to health and housing were explored in this Health Impact Assessment:

- *What are the affordable housing needs in The Crossings project area, by levels of affordability, size/ number of units, and how can the project help to meet these needs?*
- *How does household overcrowding in this neighborhood compare to citywide conditions?*

- *How does housing quality currently impact community health for local residents?*

B. Existing Conditions

Home Ownership

In the 51 census block groups around The Crossings, 22% of housing units are owner occupied, compared to 39% in the City of Los Angeles, and 48% in the County. Of 248 community residents surveyed in this area, 201 reported that they rent their homes, and 47 indicated that they are homeowners, which is not far off from the census data for the project area.

Housing Density

There are an estimated 23,721 housing units in the 4.4 square mile zip code area near The Crossings, which translates to a density of 8.5 units per acre.¹

Housing Affordability

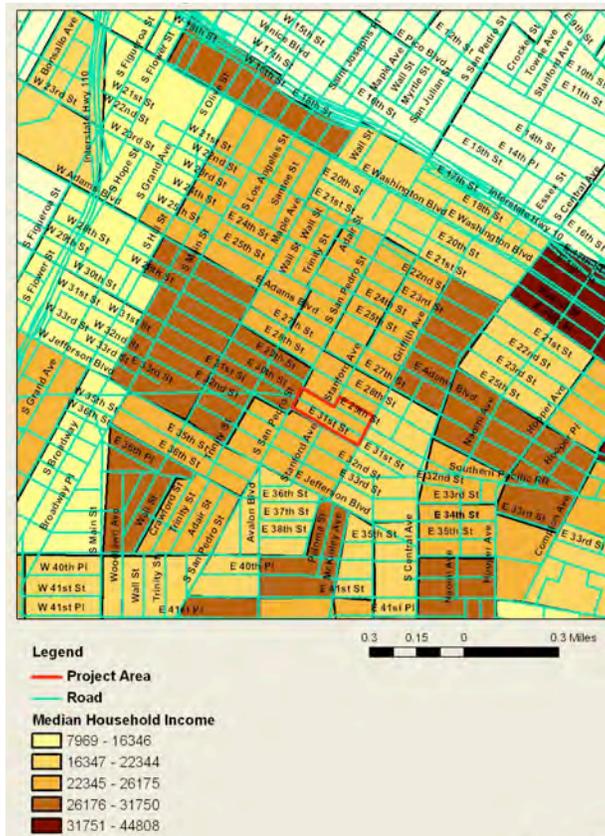
In 2007, the average rent for a 2-bedroom, 1-bathroom apartment in the City of Los Angeles was approximately \$1,740 per month.² At this level of rent, in order for a working family to spend what is considered to be an affordable percent of their income (30% of income, see appendix A) on housing costs, they would need to earn approximately \$5,800 per month, or \$69,600 per year.³ In 2005 the annual median income (AMI) for a family of four in Los Angeles County was only \$55,100.⁴ At this AMI, an affordable rent would be approximately \$1,377 per month.

Ability to afford rent in The Crossings project area is even more limited than in other areas of the City and County of Los Angeles as a result of low incomes and high rates of poverty. In the area surrounding The Crossing project site, 39% of the population was living below the poverty line in 2000. In comparison, only 17.9% of Los Angeles County, and 22% of those living in the City of Los Angeles were found to be living below the poverty line at that time.⁵ The fact that people in the 29th Street project area who receive public assistance is estimated to be *more than twice* that of people in the city of Los Angeles is an additional indicator of the low levels of income in this neighborhood.⁶

In The Crossings project area, household incomes are significantly less, on average than that in the City and County of Los Angeles. In 1999, the median household income in the census block groups around the project area was \$23,496, nearly 50% less than that in Los Angeles County at the time.⁷ By 2005 the estimated median household income in the 90011 zip code surrounding The Crossings project area was approximately \$27,739, about half of the estimated statewide median income for that year.⁸ At this level of income, an affordable rent according to federal standards would be approximately \$693 or less per month.

Median incomes reported in the census are higher, on average, than what was reported by local residents in the community survey. Of 242 residents in the project area who responded to the survey question about their income, 30% reported earning an annual household income between \$20,000 and \$32,000, and 60% indicated that their household income was less than \$20,000 per year.

Figure 1-1: A map of median household income around The Crossings' project area⁹



Crowding

Even though overcrowding in Los Angeles County has declined overall in the past 20 years, housing production has still failed to meet the enormous population growth that the region has experienced over the past few decades.¹⁰ Housing experts estimate that an additional 4000 housing units would need to be built each year in the State of California just to meet current demand.¹¹

According to the U.S. Department of Housing and Urban Development, overcrowding is defined as having more than 1 person living in a habitable room, and having more than 1.5 people residing in a habitable room is considered to be severe overcrowding. According to the 2000 census, 24% or close to one-quarter of renter households in California were overcrowded, with this number approaching nearly one-third in some counties.¹² One quarter of the overcrowded renter households in the state contained more than one family, and it is estimated that of all owner and renter occupied households that are overcrowded, more than half are severely overcrowded.¹³ In Los Angeles County, an estimated 26% of all households were overcrowded in 2000.¹⁴

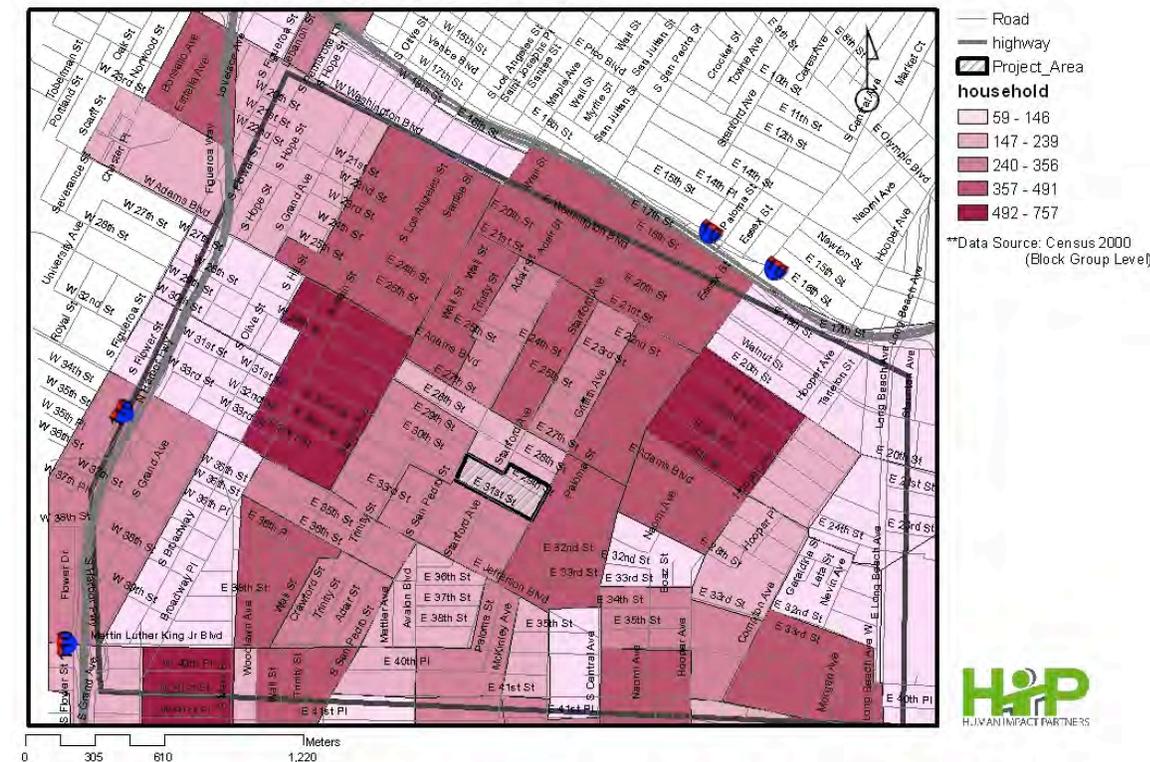
Overcrowding in The Crossings project area is a particularly severe problem. Two-thirds of the renter-occupied housing units in area are overcrowded, where as city and countywide only one-third of renter-occupied households are overcrowded.¹⁵ According to census data from 2000, nearly 55% of renter-occupied households in the 51 block groups surrounding the project area are severely overcrowded (36.8% having more than 2 occupants per room), whereas in the County and City of Los Angeles the number of severely overcrowded renter-occupied units is closer to between 21% and 24%, respectively.¹⁶ Owner-occupied housing units in the block groups around the project area

have significantly less overcrowding, with about 15% considered overcrowded, and 35% considered severely overcrowded.¹⁷ However, this is still approximately *three times* the amount of overcrowding and *five times* the amount of severe overcrowding that is estimated by the 2000 census for owner-occupied housing units in the City and County of Los Angeles.¹⁸ Additionally, it is important to note that estimates of overcrowding, as with other measures in the census, are often considered to be underreported, thus indicating that the “ground truth” of the current conditions may actually be more severe than what this data indicates.

	Percent of Overcrowding in Renter Households
State of California	24%
Los Angeles County	26%
The Crossings project area	67%

Household Size

Figure 1-2: A map of the number of households in the Crossings project area



In the 90011 zip code, 84.5% of households are family households, compared to 68.9 in the State.¹⁹

According to the Census 2000, in the 51 block groups around The Crossings project area, an estimated 12.6% of the households are 2-person, 16.4% are 4-person, and more than 44% are reported to be 5-person and above.²⁰ Of family households in the 90011 zip code 11.5% are two-person families, 14.5% are 3-person families, 18.9% are 4 person families, 18.6% are 5 person families, 14.1% are 6 person families, 22.4% are 7 or more person families.²¹

Responses from survey respondents living in the project area indicated that an average of 5 to 6 people live in each household, and the households are typically made up of more than 1 family (of on average 3 adults and between 2 and 3 children). Thirty-two percent of the community survey respondents said that they live in one-bedroom homes, 33% in two-bedroom houses, 25% have three-bedrooms in their homes, and less than 10% live in homes with four or more bedrooms. Twenty-six percent of (249) community survey respondents indicated that they do not have a separate living room/family room in their homes.

C. Analysis

As shown in the diagram in the introduction of this section, housing has an important impact on health outcomes. This chapter explores specific pathways linking housing affordability, availability and quality of housing to health outcomes. Through this HIA we focused on understanding how The Crossings development could address local community needs related to housing.

Residential Density

With an estimated density of 38.7 dwelling units per acre, The Crossings development, as proposed in the composite site plan, would have a much higher average density than is found throughout the surrounding 90011 zip code (8.5 dwelling units per acre).

Residential density impacts access to goods and services, success of neighborhood retail, walkability, success of public transit, amount and access to parks and open space and other factors that impact health. High density housing serves these health-related needs best.

The compact nature of higher-density development requires less extensive infrastructure to support it, making delivery of basic services like mail, trash collection, and police and fire protection more efficient.²² With more people and activity within the same amount of space, communities with higher-density development have also been found to have greater safety. A random sample of 600 calls for service in Phoenix, Arizona, found that an apartment unit's demand for police services was less than half of the demand created by a single-family house.²³

In regards to property values surrounding higher density developments, no discernable difference exists in the appreciation rate of properties located near higher-density development and those that are not. Some research even shows that higher-density development can increase property values. For example, studies at Virginia Tech University found that over the long run, well-placed apartments with attractive design and landscaping actually increase the overall value of detached houses nearby. They cite three possible reasons. First, the new apartments could themselves be an indicator that an area's economy is vibrant and growing. Second, multi-family housing may increase the pool of potential future homebuyers, creating more possible buyers for existing owners when they decide to sell their houses. Third, new multifamily housing, particularly as part of mixed-use development, often makes an area more attractive than nearby communities that have fewer housing and retail choices.²⁴

Negative health implications have also been associated with urban sprawl. Research has found that people living in counties with sprawling development are less likely to walk, and more likely to weigh more and to suffer from high blood pressure than those living in less sprawling counties.²⁵ One study found that rates of walking/biking for transport were nearly 5 times higher (14.5% compared to 3.3%) in high density blocks (>3,000 units/square mile) as compared to low density blocks (0-99 housing units per square mile).²⁶ People in sprawling areas also drive more. Vehicle miles traveled

are directly proportional to air pollution and greenhouse gas emissions. Air pollutants, including ozone and particulate matter are causal factors for cardiovascular mortality and respiratory disease and illness. Greenhouse gases contribute to climate change and may increase heat-related illness and death, health effects related to extreme weather events, health effects related to air pollution, water-borne and food-borne diseases and vector-borne and rodent-borne disease. Areas with high levels of vehicle miles traveled per capita also tend to have higher accident and injury rates.

Housing Affordability

The Crossings intends to provide housing (apartments) for families earning 30% to 60% of the area median income for Los Angeles County, as published by the Department of Housing and Urban Development (HUD). For 2008, this range was estimated to be between \$18,180 for a two-person family to \$49,140 for a five-person family.

Expanding access to affordable housing for renters and home-owners, especially those considered to be in the category of low and very low-income, aligns with a number of existing standards related to housing, including those set forth by the U.S. Department of Housing and Urban Development, the State of California Department of Housing and Community Development, the California General Plan Guidelines, the California Government Code (Section 65584), and the City of Los Angeles General Plan (See Appendix A for more detail about these particular standards).

According to federal guidelines, housing is considered to be affordable when residents spend less than 30% of their income on rent, however, many of the nation's households spend over half their income on housing costs.²⁷ Higher rents, especially for low-income families, limit the amount that a family can spend on other life needs, such as food, clothing, medication, health care and family activities that provide exercise and emotional stability.^{28,29} In the United States, low paying jobs and high housing costs are the most often cited reasons for hunger.³⁰ In fact, according to both US and Canadian studies, higher levels of food insecurity have been found to be associated with an increasing percentage of income spent on housing.^{31 32} The Canadian study specifies that in the lowest income quintile, 68% of people were unable to meet a food spending adequacy guideline. The USDA determined that median housing costs can predict food insecurity on a state-level; i.e., the higher the median cost of housing, the more likely a family is not able to consistently feed itself.³³ Research has also found significant associations between unaffordable rent, and inadequate childhood nutrition and growth.^{34 35}

The type of housing in which low-income families reside, such as whether a family lives in owner occupied housing, privately rented housing, or public housing has a significant relationship to their health, and therefore can adversely affect their health outcomes.³⁶ In some cases this is a result of landlords lacking resources or desire to adequately maintain housing.³⁷ Tenants who may be afraid to complain about poor housing conditions are left to suffer the health consequences of exposure to indoor air pollution and other conditions associated with substandard housing.³⁸

Community Perspectives on Housing Affordability

Responses from the community survey administered to 264 residents in The Crossings project area during the Summer of 2008 clearly indicated that lack of affordable housing is a priority health concern. Residents expressed their concern that there is not enough housing to meet current demand and that the high cost of housing makes it difficult for local residents to find housing.

Seventy-three percent (of 252 who responded to the question) said that it was hard for them to pay the mortgage/rent some months.

Housing Affordability: Conclusions

Based on data for census blocks around The Crossings project area, it is clear that median household income in the project area is significantly lower than in the rest of the City and County of Los Angeles, indicating that the housing costs, as currently proposed for The Crossings, will not be affordable for those local residents most in need of housing.

At the level of income that is estimated by the Census for people living in the area around The Crossings, and from what the community survey reveals about household income for residents living in close proximity to The Crossings, affordable monthly rent (as designated by federal guidelines) for households in this community would be approximately \$500 - \$800 per month or below.

Table 1-1: Affordable Monthly Rent Per Median Household Income

	Median Household Income	Affordable monthly rent as designated by federal guidelines*
LA County	\$55,100 (2005)	\$1,377
90011 Zip Code	\$27,739 (2005)	\$693
The Crossings project area*	\$23,496 (1999)	\$587

According to federal guidelines, housing is considered to be affordable when residents spend less than 30% of their income on rent.

* According to the community survey

Impacts of Housing Affordability on Residential Displacement and Homelessness

Increased rents or mortgage costs can also precipitate eviction and displacement, conditions that can lead to overcrowding, segregation and even homelessness. Displacement is a stressful life event and relocation can have significant impacts on health and childhood development.³⁹ Residential stability at childhood (moving 0-2 times by the age of 7) increases the odds that an individual will rate their health positively in midlife by 42%.⁴⁰ More specifically, increased mobility in childhood (moving 3 or more times) resulted in a 36% increased risk of developing depression and also correlated with academic delay in children, school suspensions, difficult school transitions and emotional and behavioral problems.^{41 42} Studies have also shown that for adolescents with high mobility during childhood, the odds of smoking increased 1.3 times, and risk for suicide increased 2.5 times.⁴³ For adults, displacement can result in loss of jobs, and loss of health protective social networks.⁴⁴

Inability to afford housing costs can lead to homelessness. In a study done in New York City, age-adjusted death rates were four times higher in the homeless than the general U.S. population, and it is estimated that 78% of homeless children have suffered from depression, behavior problems, or severe academic delay.^{45 46}

Community Perspectives on Residential Displacement

Nearly two-thirds (63.5%) of 252 community residents who responded to a survey question about displacement said that they have had friends or relatives move out of The Crossings project area because they could not afford to live there anymore.

Residential Displacement: Conclusions

As the housing being developed at The Crossings will be located in an area that was formerly used for industrial purposes, it offers an opportunity to build additional units that can serve to improve conditions for those most in need, without displacing existing residents. Although, in order for the housing at The Crossings to help local residents who are in danger of being displaced from their homes due to lack of affordability, the housing units must be offered both for rent and for sale at a rate that is affordable to local community residents most in need.

Impacts of Housing Affordability on Residential Segregation

Frequently, affordable housing is concentrated in ethnically or economically segregated neighborhoods, which can impact environmental assets and exposures. Segregated neighborhoods have fewer institutional assets such as schools, libraries, and public transportation, and are often the site for the location of environmentally burdensome infrastructure such as highways, power plants, factories and waste sites, which compromise air, noise, water, and soil quality.^{47 48 49} Residentially segregated neighborhoods have been found to experience more violent crime, and more infectious and chronic diseases.^{50 51} Living in a racially segregated neighborhood has also been shown to put individuals at higher risk for transmission of infectious diseases, such as tuberculosis.⁵²

Research has shown that reducing income-related residential segregation improves household safety, reduced exposure to crime, and decreased neighborhood social disorder.⁵³ Having housing that serves residents of a variety of income levels may help to prevent the neighborhood surrounding The Crossings from being economically segregated and isolated, or turning into an area where poverty is concentrated. Attracting people with higher incomes to the neighborhood may also help to support and improve the local economy.

Residential Segregation: Conclusions

Due to the overwhelming need for affordable housing among community residents living in the vicinity of The Crossings, and the health implications resulting from the current housing conditions here, it is crucial that addressing the need for affordable housing is made a priority as local plans for development are made. Offering mixed-income housing in the case of The Crossings will not change the overall economic balance of the community where this development is located. In order to do this, a larger neighborhood strategy and plan for additional housing, retail and other development that addresses the needs of the existing low-income residents, while also drawing new residents with higher incomes to the area. If a larger plan for a more mixed income neighborhood around The Crossings is developed, The Crossings may consider aligning their development plans within the scope and vision of this plan.

Impacts of Housing Affordability on Household Crowding

A preliminary demand study for the “Los Angeles Market Area” around The Crossings estimated that there is currently a demand for 1,657 two-bedroom units, 1,527 three-bedroom units and 1,656 four-bedroom units.⁵⁴ The 450 units of multi-family affordable housing proposed by Urban Housing Community’s (UHC) for The Crossings project is currently slated to include 32 two-bedroom and 14 three-bedroom units in Phase I of the development.

The Department of Housing and Urban Development has found that “relative to other urban areas, central cities tend to have a higher concentration of renters, lower income households, and foreign-born populations which are more likely to live in overcrowded homes.”⁵⁵

Overcrowding is a common response to unaffordable housing. The impacts of overcrowding on health are both direct and indirect. Overcrowding increases the risk of passing infectious diseases. A study in Sao Paulo, Brazil found that for every average increase of one additional dweller per bedroom in a household there was a 14% increase in tuberculosis mortality.⁵⁶ There can also be increased risk of ear infection in children due to overcrowding.⁵⁷ Children in low-income families exposed to one or more environmental risks such as overcrowding and noise showed an increase in urinary cortisol and epinephrine, which are biomarkers of chronic stress.⁵⁸ Overcrowding and poor-quality housing also have a direct relationship to poor mental health, developmental delay, heart disease, and even short stature.⁵⁹ Overcrowded housing has been associated with increased mortality rates (particularly for women), meningitis, and *Helicobacter pylori* bacteria that can cause stomach ailments.⁶⁰ Crowded housing conditions also contribute to poor child development and school performance, in part, because overcrowding limits the space and quiet necessary for children to do homework.^{61 62} Additionally, overcrowding can affect health indirectly by creating conditions conducive to poor sanitation, high environmental noise, and residential fires.⁶³

Community Perspectives on Household Crowding

As evidenced in the “Existing Conditions” section of this chapter, crowding is an important issue of concern for residents currently living in The Crossings project area. Local residents who responded to the community survey indicated that alleviating crowded living conditions was one of their priority concerns. Ninety-two percent of the 110 survey respondents who live with more than one family in their household stated that this was the case not due to preference, but out of need.

Household Crowding: Conclusions

Considering that existing conditions data shows a high percentage of families and households in the project area have more than four or five members, the demand for housing units at The Crossings that have more than two-bedrooms is likely to be high, and exceed the number currently proposed. In order for the housing built at The Crossings to alleviate overcrowded conditions in the local area, additional units with more than two-bedrooms should be made available. Increasing the number of units at The Crossings with more than two-bedrooms aligns well with the Housing Element of the General Plan of the City of Los Angeles, which specifically “encourage[s] the inclusion of three, four and five bedroom units in all residential projects in order to accommodate larger families”, and includes a policy to “continue to facilitate the development of multiple-bedroom dwelling units for large families.” (See Appendix A).

Housing Quality

The connection between inadequate housing and poor health is increasingly well documented.⁶⁴ Substandard and deteriorating housing contributes to a variety of ailments, from respiratory disease and neurological disorders to psychological and behavioral dysfunction.⁶⁵ Home deterioration such as compromised climate control, growth of mold and mildew, pest or rodent infestation can lead to respiratory disease such as asthma or other allergic symptoms.^{66 67 68} Research has also found that children living in dilapidated, poorly maintained inner-city housing may be at a particularly high risk for lead poisoning.⁶⁹

At the community level, deterioration of housing stock results in “housing filtering”, or the trend of those with lower levels of income to move into a neighborhood over time, which results in progressively poorer housing maintenance and quality.^{70 71}

Community Perspectives on Housing Quality

Housing quality is another priority issue of concern for area residents who responded to the community survey. Responses indicated that community residents overwhelmingly agree the condition of housing in the neighborhood is poor and in need of improvements. Those surveyed indicated specifically that houses are old and poorly maintained by the landlords, and as a result, residents are concerned about exposure to mold, lead paint, indoor air quality, as well as rodent and insect infestation.

Housing Quality: Conclusions

By reducing the proportion of occupied housing units that are substandard, and improving the quality of affordable rental housing, the plan to build housing at The Crossings is aligned with the Department of Health and Human Services *Healthy People 2010* (Goal 8-23) as well as the US Department of Housing and Urban Development Strategic Plan Objectives (See Appendix A).

Marketing Plan for The Crossings Housing

All housing applicants will need to be qualified according to the income and background requirements associated with the guidelines proposed by UHC’s property management company for the development. In order to ensure that these new housing units are available and accessible to those neighborhood residents whose need for quality, affordable housing has been clearly demonstrated, UHC plans to work closely with project partners including ACORN and the 28th Street School to disseminate information about The Crossings housing and the associated application process.

D. Recommendations: Health-promoting Mitigations for Housing:

Based on the connections between health and housing costs, census data, the community survey, and federal and local guidelines, the following recommendations have been developed in order to ensure that the proposed housing at The Crossings is affordable, adequate in size/number of bedrooms, and provides quality living conditions for local residents in the 29th St./ San Pedro St. area.

Housing Affordability

- UHC should prioritize developing housing units for The Crossings that can be offered at an affordable rate for local community residents most in need of housing.
- The range of affordable housing costs for The Crossings should be recalculated to reflect rates that allow local residents to be paying no more than 30% of their income on rent or mortgages.
- UHC should consider the potential benefits of having The Crossings be part of a larger community vision to attract residents with mixed levels of income to the area, once local needs for affordable housing have been addressed.

Housing Size

- The size and number of bedrooms in housing units being built at The Crossings should reflect the range of family size in the local population.

Local Marketing

- UHC should work with LA ACORN to train their staff about the housing selection process for The Crossings, and LA ACORN should establish a process through which local residents can receive direct support with their housing applications.
- Additional strategies that could be used to enhance the local marketing plan for The Crossings include:
 - Advertisements in local media;
 - Development and dissemination of a flyer with information about UHC's housing application process, and about how and where local residents can receive assistance with this process from LA ACORN;
 - In order to reach local residents in most need of affordable housing, outreach strategies should include those employed to disseminate the community survey such as grassroots, door-to-door communication, and use of community facilities such as schools, churches and community centers to advertise housing and services available at The Crossings.
- Specifically target housing opportunities at The Crossings toward teachers and/or local school employees in order to focus on the link between the project site and neighborhood schools.

Safety

- Establish a schedule of regular activities for residents living at The Crossings that will increase social cohesion and the use of space at the development throughout the day in order to decrease crime and improve safety.
- Ensure that buildings facing the park and recreation space have windows open to these areas in order to increase community surveillance (*See also section on Parks and Recreational Facilities*)
- UHC and LA ACORN should initiate discussions with residents living (or who will be living) at The Crossings about how to establish a safety plan for the development's residents, and consider the possibility of hiring security guards to monitor the premises and serve as a deterrent to activities that would compromise safety at The Crossings.

E. Conclusions

Affordable housing is an important health issue. As described above, paying excess amounts for housing costs leads to people to have to choose between getting healthcare, buying food and meeting other health-promoting needs. Lack of affordable housing also leads to overcrowding, which can impact mental health and disease transmission. Additionally, high housing costs can lead to displacement, which can break health promoting social networks and lead to homelessness, which has tremendous health impacts.

Urban Housing Communities proposes to build between 350 and 450 units of affordable housing for rent and for sale at The Crossings at 29th Street. As The Crossings is a new development, being built on land that was previously used for industrial purposes, the project has the potential to provide an additional stock of affordable housing in an area where it is much needed.

Many of the details regarding the affordability, size and tenure of housing have not been planned for

The Crossings as of yet. The cost and size of the new housing should match existing and projected future community needs, and should be worked out at this early stage in the planning process.

While it is within the City and County of Los Angeles, the 29th St./ San Pedro St. area where The Crossings is located has many unique characteristics that influence the specific needs of the local population. As discussed throughout the chapter, very low levels of income, overcrowded housing conditions, and poor quality of housing in the area have contributed to health risks for local residents and a serious need affordable housing. The population living in the area around The Crossings is also comprised of a high percentage of large-sized families, creating a particular demand for housing units with multiple bedrooms.

In order for The Crossings housing to be accessible and available to local community residents for who housing is a need, the cost and size of the housing units must match their levels of income and the size of their families. Additionally, it is crucial that local residents are well-informed about the UHC housing application process, and find the support they need in order to participate in this process.

The overwhelming need for affordable housing among residents living in the areas around The Crossings is evident. Therefore, in order to improve health outcomes for these communities, it is crucial that the establishment of sufficient affordable housing be made a priority for any future neighborhood planning efforts. Taking this into consideration, it is also important to recognize that in order not to ‘ghettoize’ low and very-low income populations, and prevent the creation of a neighborhood that has poorer access to goods, services, and parks, as well as higher crime rates, and whose residents generally have less opportunity, UHC and/or other developers and stakeholders in the community should consider the possibility of aligning development at The Crossings with a larger community-wide plan to bring economic diversity and stimulus to the area, once affordable housing needs have been adequately addressed.

The need for quality and accessible affordable housing in the area surrounding the Crossings at 29th Street is clear. However, at this preliminary stage in the project’s development, details such as cost and size must be taken into account and planned for, in order that the intended projects intended benefits for the local community can be achieved.

References

¹ U.S. Census Bureau. American Fact Finder. 5-digit ZIP Code Tabulation Area GCT-PH1. Population, Housing Units, Area, and Density. Census 2000 Summary File 1 (SF 1) 100-Percent Data.

² Out of Reach in 2008”, Southern California Association of Non-Profit Housing

³ Out of Reach in 2008”, Southern California Association of Non-Profit Housing

⁴ “Affordable Housing 101”. Southern California Association of Non-Profit Housing. Available at: <http://www.scanph.org/files/Affordable%20Housing%20101.pdf>

⁵ Industrial Land Use Policy Project. Southeast Los Angeles Industrial Area, Data and Recommendations. Prepared by the Los Angeles Planning Department, Graphic Services Section, December 5, 2006. Source: Census 2000 Summary File 3.

⁶ Industrial Land Use Policy Project. Southeast Los Angeles Industrial Area, Data and Recommendations. Prepared by the Los Angeles Planning Department, Graphic Services Section, December 5, 2006. Source:

Census 2000 Summary File 3.

⁷ Selected Demographic Characteristics for 28th Street Project Area, City of Los Angeles and County of Los Angeles, 2000. (Based on aggregations of data for 51 block groups comprising the 28th Street Project Area.) Prepared by Los Angeles County Department of Health Services Office of Health Assessment and Epidemiology Data Collection and Analysis Unit.

⁸ 90011 Zip Code Detailed Profile. Available at: www.city-data.com/zips/90011.html

⁹ Data source: Census 2000.

¹⁰ “Affordable Housing 101”. Southern California Association of Non-Profit Housing. Accessed at: <http://www.scanph.org/files/Affordable%20Housing%20101.pdf>

¹¹ Bashir SA. “Home is where the harm is: inadequate housing as a public health crisis.” American Journal of Public Health. 2002 May; 92(5):733-8.

¹² California Department of Housing and Community Development. Housing Policy Development. Available at: http://www.hcd.ca.gov/hpd/housing_element2/EHN_Overpayment.php.

¹³ California Department of Housing and Community Development. Housing Policy Development. Available at: http://www.hcd.ca.gov/hpd/housing_element2/EHN_Overpayment.php.

¹⁴ “Affordable Housing 101”. Southern California Association of Non-Profit Housing. Accessed at: <http://www.scanph.org/files/Affordable%20Housing%20101.pdf>

¹⁵ Number of Housing Units by Tenure and Household Crowding, 28th Street Development Area, City of Los Angeles and Los Angeles County, 2000. Source: Census 2000 Summary File 3-California, prepared by the U.S. Census Bureau, 2002. Tabulated by LAC DPH Data Collections and Analysis Unit.

¹⁶ Number of Housing Units by Tenure and Household Crowding, 28th Street Development Area, City of Los Angeles and Los Angeles County, 2000. Source: Census 2000 Summary File 3-California, prepared by the U.S. Census Bureau, 2002. Tabulated by LAC DPH Data Collections and Analysis Unit.

¹⁷ Number of Housing Units by Tenure and Household Crowding, 28th Street Development Area, City of Los Angeles and Los Angeles County, 2000. Source: Census 2000 Summary File 3-California, prepared by the U.S. Census Bureau, 2002. Tabulated by LAC DPH Data Collections and Analysis Unit.

¹⁸ Number of Housing Units by Tenure and Household Crowding, 28th Street Development Area, City of Los Angeles and Los Angeles County, 2000. Source: Census 2000 Summary File 3-California, prepared by the U.S. Census Bureau, 2002. Tabulated by LAC DPH Data Collections and Analysis Unit.

¹⁹ 90011 Zip Code Detailed Profile. Available at <http://www.city-data.com/zips/90011.html>.

²⁰ Selected Demographic Characteristics for 28th Street Project Area, City of Los Angeles and County of Los Angeles, 2000. Prepared by Los Angeles County Department of Health Services Office of Health Assessment and Epidemiology Data Collection and Analysis Unit.

²¹ U.S. Census Bureau. American Fact Finder. 5-digit ZIP Code Tabulation Area GCT-PH1. Population, Housing Units, Area, and Density. Census 2000 Summary File 1 (SF 1) 100-Percent Data.

²² Great Communities Collaborative. “The Benefits of Compact Development: why is compact development important for good transit village design”. Available at: <http://www.greatcommunities.org/resources/regional-tools/gcc-toolkit-table-of-contents>

²³ Great Communities Collaborative. “The Benefits of Compact Development: why is compact development important for good transit village design”. Available at: <http://www.greatcommunities.org/resources/regional-tools/gcc-toolkit-table-of-contents>

²⁴ Great Communities Collaborative. “The Benefits of Compact Development: why is compact development important for good transit village design”. Available at: <http://www.greatcommunities.org/resources/regional-tools/gcc-toolkit-table-of-contents>

²⁵ McCann B. and Ewing R. 2003. Measuring the health effects of sprawl: A national analysis of physical activity, obesity and chronic disease. Smart Growth America, Surface Transportation Policy Project.

²⁶ Ross CL, Dunning AE. Land use transportation: An examination of the 1995 NPTS data. 1997. U.S. Department of Transportation.

-
- ²⁷ Joint Center for Housing Studies. 2006. The State of the Nation's Housing. Joint Center for Housing Studies at Harvard University. Available at <http://www.jchs.harvard.edu/publications/markets/son2006/son2006.pdf>.
- ²⁸ Bhatia R, Guzman C. 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 Department of Public Health. Occupational and Environmental Health Section. Program on Health, Equity, and Sustainability.
- ²⁹ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.
- ³⁰ Sandel M, Sharfstein J, Shaw R. 1999. There's No Place Like Home: How America's Housing Crisis Threatens Our Children. Housing America, San Francisco, CA.
- ³¹ Scott RI, Wehler CA. 1998. Food Insecurity/Food Insufficiency: an empirical examination of alternative measures of food problems in impoverished US Households. Institute for Research on Poverty, Discussion Paper No 1176-98. Available at <http://www.irp.wisc.edu/publications/dps/pdfs/dp117698.pdf>.
- ³² Kirkpatrick SI, Tarasuk V. 2007. Adequacy of food spending is related to housing expenditures among lower-income Canadian households. *Public Health Nutrition* 10(12):1464-73.
- ³³ Bartfeld J, Dunifon R. 2005. State-level predictors of food insecurity and hunger among households with children. Contractor and Cooperator Report No 13. Available at <http://www.ers.usda.gov/Publications/CCR13/ccr13.pdf>.
- ³⁴ Sharfstein J, Sandel M, Kahn R, Bauchner H. Is child health at risk while families wait for housing vouchers? *American Journal of Public Health*. 2001;91: 1191-1192.
- ³⁵ Sharfstein J, Sandel M, Kahn R, Bauchner H. Is child health at risk while families wait for housing vouchers? *American Journal of Public Health*. 2001;91: 1191-1192.
- ³⁶ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8
- ³⁷ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.
- ³⁸ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.
- ³⁹ Guzman C, Bhatia R, Durazo C. 2005. Anticipated Effects of Residential Displacement on Health: Results from Qualitative Research. Available at http://www.sfphes.org/publications/reports/Trinity_Focus_Groups.pdf.
- ⁴⁰ Bures RM. 2003. Childhood residential stability and health at midlife. *American Journal of Public Health* 93:1144-8.
- ⁴¹ Gilman SE, Kawachi I, Fitzmaurice GM, Buka SL. 2003. Socio-economic status, family disruption and residential stability in childhood: relation to onset, recurrence and remission of major depression. *Psych Medicine* 33:1341-55.
- ⁴² Cooper M. 2001. Housing affordability: A children's issue. Discussion Paper No. F-11. Canadian Policy Research Networks, Inc. Available at <http://www.cprn.com/en/doc.cfm?doc=176>.
- ⁴³ Dong M, Anda RF, Felitti VJ, Williamson DF, Dube SR, Brown DW, Giles WH. 2005. Childhood residential mobility and multiple health risks during adolescence and adulthood. *Archives of Pediatric & Adolescent Medicine* 159:1104-1110.
- ⁴⁴ Bhatia R, Guzman C. 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 Department of Public Health. Occupational and Environmental Health Section. Program on Health, Equity, and Sustainability.
- ⁴⁵ Zima BT, Wells KB, Freeman HE. 1994. Emotional and behavioral problems and severe academic delays among sheltered homeless children in Los Angeles County. *American Journal of Public Health*. 84:260-264

-
- ⁴⁶ Barrow SM, Herman DB, Cordova P, Stuenkel EL. 1999. Mortality among homeless shelter residents in New York City. *American Journal of Public Health* 1999;529-534.
- ⁴⁷ "Evidence Base". Human Impact Partners. Available at www.humanimpact.org/EvidenceBase
- ⁴⁸ Kawachi I, Berkman L. 2003. *Neighborhoods and Health*. New York: Oxford University Press.
- ⁴⁹ Bhatia R, Guzman C. 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 Department of Public Health. Occupational and Environmental Health Section. Program on Health, Equity, and Sustainability.
- ⁵⁰ Wilson WJ. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. University of Chicago Press: Chicago, IL.
- ⁵¹ Williams DR, Collins C. 2001. Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Reports* 116:404-416.
- ⁵² Acevedo-Garcia D. 2000. Residential segregation and the epidemiology of infectious diseases. *Social Science and Medicine* 51:1143-1161.
- ⁵³ 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. *American Journal of Preventive Medicine* 24(3S):47-67.
- ⁵⁴ Source: "Preliminary Demand Study – Los Angeles Market Area", Prepared by Laurin Associates for Urban Housing Communities. 11/9/2004.
- ⁵⁵ "Measuring Overcrowding in Housing". U.S. Department of Housing and Urban Development, Office of Policy Development and Research. September 2007. Available at: http://www.huduser.org/Publications/pdf/Measuring_Overcrowding_in_Hsg.pdf
- ⁵⁶ Antunes JL, Waldman EA. 2001. The impact of AIDS, immigration and housing overcrowding on tuberculosis death in Sao Paulo, Brazil, 1994-1998. *Social Science and Medicine* 52(7):1071-1080.
- ⁵⁷ Bhatia R, Guzman C. 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 Department of Public Health. Occupational and Environmental Health Section. Program on Health, Equity, and Sustainability.
- ⁵⁸ Evans GW, Marcynyszyn LA. 2004. Environmental justice, cumulative environmental risk, and health among low-and middle-income children in upstate New York. *American Journal of Public Health* 94(11):1942-1944.
- ⁵⁹ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.
- ⁶⁰ Office of Deputy Prime Minister. 2004. The impacts of overcrowding on health and education: A review of the evidence and literature. London. Available at <http://www.communities.gov.uk/documents/housing/pdf/138631>
- ⁶¹ Ross DP, Roberts P. *Income and child well being: A new perspective on the policy debate*. Canadian Council for Social Development. Ottawa. 1999.
- ⁶² Cooper, Merrill. *Housing Affordability: A Children's Issue*. Canadian Policy Research Networks Discussion Paper. Ottawa. 2001. <http://www.cprn.com/en/doc.cfm?doc=176>.
- ⁶³ Cooper M. 2001. *Housing affordability: A Children's issue*. Discussion Paper No. F-11. Canadian Policy Research Networks, Inc. Available at <http://www.cprn.com/en/doc.cfm?doc=176>.
- ⁶⁴ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.
- ⁶⁵ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.
- ⁶⁶ Eggleston PA, Butz A, Rand C, Crutin-Brosnan J, Kanchanaraska S, Swartz L, Breyse P, Buckley T, Diette G, Merriman B, Krishnan JA. 2005. Home environmental intervention in inner-city asthma: A randomized controlled trial. *Annals of Allergy, Asthma and Immunology* 95(6):496-497.

⁶⁷ Kercksmar CM, Dearborn DG, Schluchter M, Xue L, Kirchner HL, Sobolewski J, Greenberg SJ, Vesper SJ, Allan T. 2006. Reduction in asthma morbidity in children as a result of home remediation aimed at moisture sources. *Environmental Health Perspectives* 114(10):1574-1580.

⁶⁸ Bradman A, Chevrier J, Tager I, Lipsett M, Sedgwick J, Macher J, Vargas AB, Cabrera EB, Camacho JM, Weldon R, Kogut K, Jewell NP, Eskenazi B. 2005. Association of housing disrepair indicators with cockroach and rodent infestation in a cohort of pregnant latina women and their children. *Environmental Health Perspectives* 113(2):1795-1801.

⁶⁹ Bashir SA. "Home is where the harm is: inadequate housing as a public health crisis." *American Journal of Public Health*. 2002 May; 92(5):733-8.

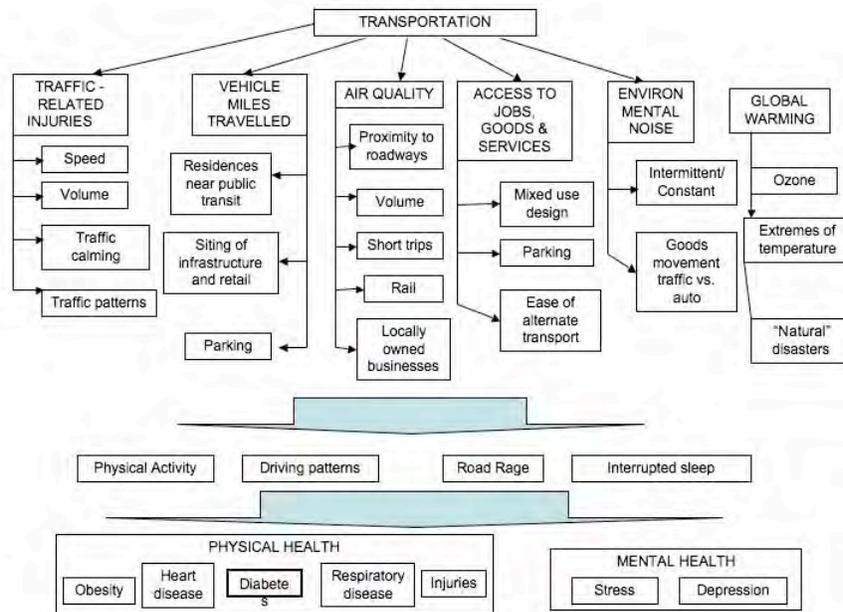
⁷⁰ O'Sullivan A. 1993. Why is housing different? Chapter 17 in *Urban Economics*, 5th Edition. McGraw-Hill:Boston.

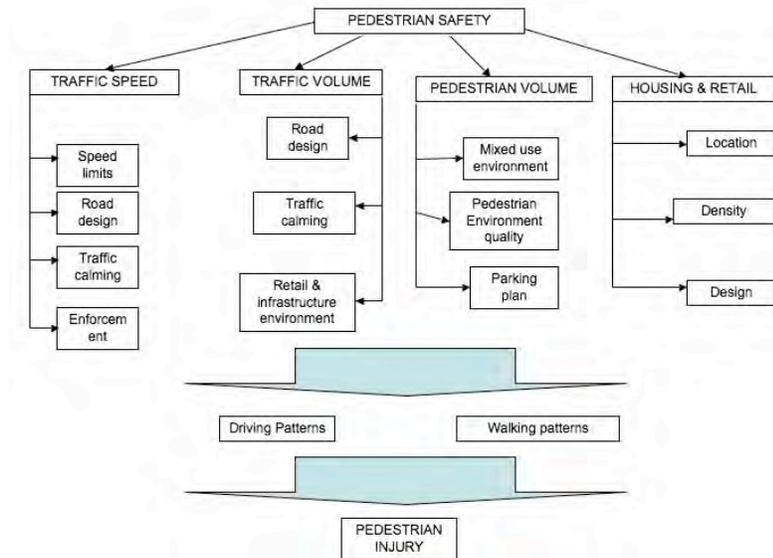
⁷¹ Kiefer D. 1980. Housing deterioration, housing codes, and rent control. *Urban Studies* 17:53-62.

29th St. / San Pedro St. Area Health Impact Assessment
Chapter 2:
Pedestrian Safety, Neighborhood Walkability & Public Transit

Health Pathways

The analysis of pedestrian safety, neighborhood walkability and public transit considered the effects of The Crossings at 29th Street Development Project (“The Crossings”) on the pedestrian environment and public transportation. It includes consideration of pedestrian injuries in traffic accidents, traffic volume, and intersection quality, as well as use of public transit. Some of these pathways depicting connections between health and transportation and pedestrian safety are shown in the diagrams below:





A. Introduction

As shown in the above diagrams, there are a number of ways in which transportation, pedestrian and bicyclist safety can impact health. Areas lacking safety features for pedestrians are more likely to have incidence of injuries and fatalities resulting from collisions of pedestrians or bicyclists with motor vehicles. Other examples of features that make the environment unsafe for pedestrians or bicyclists include insufficient street lighting and lack of curb ramps for strollers or wheelchairs. Avoiding walking or biking as a mode of transportation due to safety concerns decreases opportunity for physical activity, and ultimately impacting health. Increased walking and biking can reduce vehicle use, which can result in a decrease in air pollution, noise, and greenhouse gas emissions - all of which can impact health. Walking and biking in a neighborhood can also promote social cohesion. Strong social networks are a source of material and emotional support for people who are sick, and their presence has been shown to reduce the likelihood of getting sick.

This chapter provides an assessment of several health effects, mediated through pedestrian safety, neighborhood walkability, and public transportation, that The Crossings could impact. The following questions relating to health and pedestrian safety, neighborhood walkability and public transit were explored in this Health Impact Assessment:

- *How safe are the streets/ sidewalks/ intersections around The Crossings project site that pedestrians use to access various resources in their community?*
- *How safe is biking as a mode of transportation in the community around The Crossings?*
- *Will the design of The Crossings promote social interaction?*
- *Are their walkable routes to existing public parks in the area?*
- *Is the proposed project within accessible distance to public transportation?*
- *Does public transit adequately serve the needs of low-income residents living in the vicinity of The Crossings?*

- *Will the proposed project facilitate walking as a mode of transportation?*

B. Existing Conditions:

Pedestrian Safety

According to the Surface Transportation Policy Project’s (STTP) “Mean Streets 2004” report:

- In 2002-2003, in California, there were 1438 pedestrian fatalities, or 2.04 fatalities per 100,000 people. This means that pedestrian fatalities accounted for 17.3% of traffic deaths. This rate of pedestrian fatalities is double the Healthy People 2010 goal (See Appendix A).
- While pedestrian safety, as measured by STTP’s Pedestrian Danger Index, improved between 1994/1995 and 2002/2003 for the Los Angeles-Riverside-Orange County Metropolitan Area (potentially because of a decrease in the number of pedestrians), the area is still one of the least safe places for pedestrians.
- Of the nearly \$12 billion of Federal Transportation funds spent in California between 1998 and 2003, only 0.9% went towards pedestrian or bicycle projects. That is only \$0.51 per person.
- Racial and ethnic minorities are over-represented in pedestrian deaths;
- Children are over-represented in pedestrian deaths.

According to “Death on the Crosswalk: A Study of Pedestrian-Automobile Collisions in Los Angeles”¹:

- Los Angeles neighborhoods with high population densities and neighborhoods with high traffic volumes had higher probabilities for pedestrian collisions;
- Los Angeles neighborhoods with higher concentrations of Latino populations and neighborhoods with a higher percentage of low-income residents had a higher concentration of per capita pedestrian collisions.
- Intersections that were hot-spots for collisions with pedestrians shared a number of characteristics, including a lack of pedestrian lighting.

Pedestrian and Bicyclist Safety

The following pedestrian-vehicle and bicyclist-vehicle collision data (Table 2-1) was obtained from the Statewide Integrated Traffic Records System (SWITRS), which is a public database of reported vehicle crashes in California that occur on public roadways. Due to the likelihood of underreporting, this data represents a minimum number of collisions.

Table 2-1: Number of Pedestrian and Bicyclist Collisions, Injuries and Deaths in The Crossings development area* per Year, 1997 – 2006

Year	# of Pedestrian Collisions	# of Pedestrian Injuries	# of Pedestrian Deaths	# of Bicyclist Collisions	# of Bicyclist Injuries	# of Bicyclist Deaths
1997	7	7	2	3	2	1
1998	0	0	0	2	2	0
1999	6	7	0	2	2	0
2000	8	8	1	2	2	0
2001	6	6	1	2	2	0
2002	6	4	2	3	2	1
2003	16	15	3	2	3	0

2004	9	11	2	2	2	0
2005	7	5	3	2	2	0
2006	3	1	2	1	1	0
TOTAL	68	64	16	21	20	2

Source: SWITRS

*see map below for area included in this analysis

There are no apparent trends in the number of pedestrian or bicyclist collisions in The Crossings project area over this ten-year period.

Of the 67 pedestrian collisions (where it was indicated whether the collision occurred at an intersection), 38 (57%) of them did not occur at an intersection. Sixteen out of the 21 bicycle collisions did not occur at intersections. (SWITRS)

The maps below in figures 1 and 2 show the locations of the collisions reported in SWITRS. Many of the accidents occurred within ¼ mile of the project site. Many of the pedestrian injuries and deaths occurred on San Pedro Street.

Figure 2-1: A map of pedestrian injuries and deaths in The Crossings development area (1997-2006)

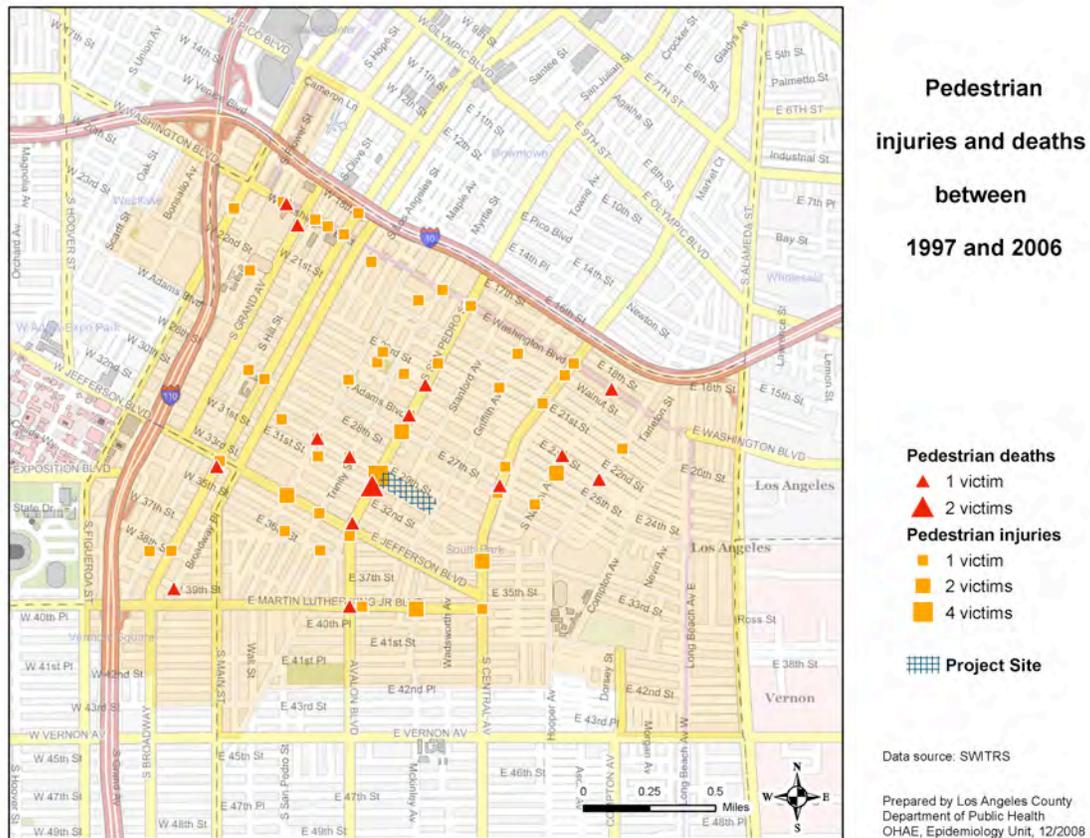
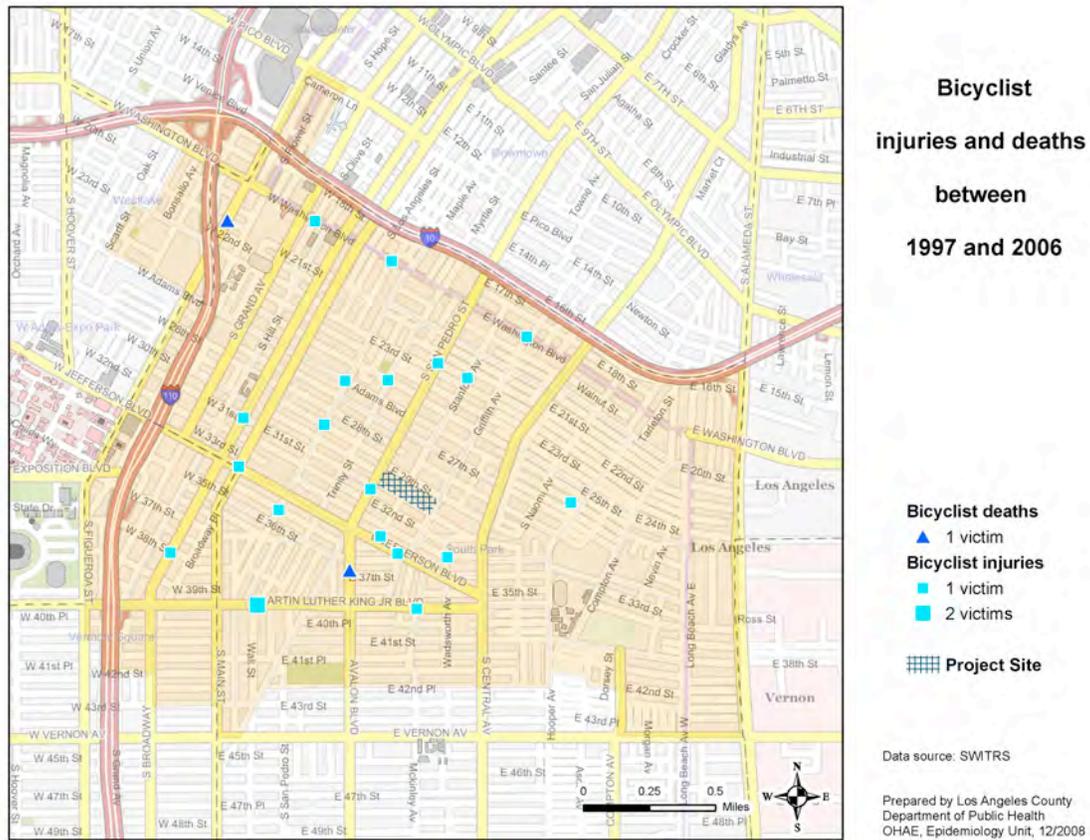


Figure 2-2: A map of bicyclist injuries and deaths in The Crossings development area (1997-2006)



There are few bike routes near The Crossings project site. A small segment of Class II bike route is within 0.5 miles of site on E. MLK Jr Blvd between Avalon and Central, and S Main St is a Class III bike lane within 0.5 miles of The Crossings development. A map of the City’s bicycle routes in the area near the project site is shown in figure 2-3.

In field observations, it was noted that many bicyclists chose to ride on the sidewalks rather than in the streets.

Figure 2-3: Map of bike routes near The Crossings development



Source: http://www.metro.net/riding_metro/maps/images/la_bike_map.pdf

Intersection Quality

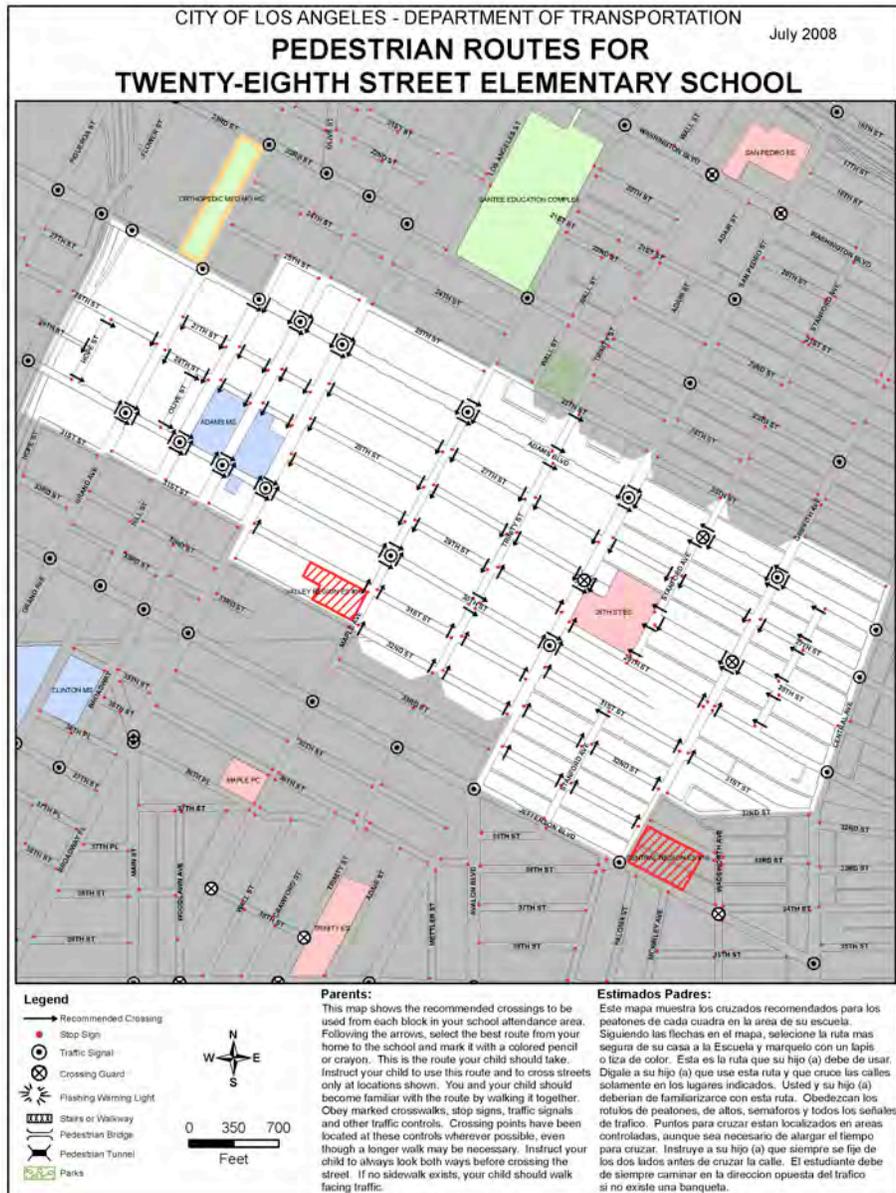
A limited pedestrian quality assessment was conducted by HIP on October 17, 2008. This assessment focused on 11 intersections near the project site; 7 intersections were immediately adjacent to the project site and the remaining 4 were within several blocks. All intersections evaluated were considered by the City of Los Angeles Department of Transportation to be on the best routes to the neighboring 28th Street elementary school (see figure 2-4). The assessment, whose results are shown in table 2, was intended to capture a snapshot of the area's pedestrian environment.

Table 2-2: An evaluation of 11 intersections near The Crossings project site.

Intersection	Adjacent to Site?	Crosswalks / # Crossings	Crosswalk Ladder	Traffic Signal	Pedestrian Signal	Traffic Safety/ Calming	# Curb Ramps	Notes
San Pedro & 29 th	Y	2 / 4	N	N	N/A	None	4	2 way stop
San Pedro & 30 th	Y	3 / 3	N	Y	N	None	0	Near school; not enough time to cross
San Pedro & 31 st	Y	0 / 4	N	N	N/A	None	4	
Stanford & 29 th	Y	3 / 3	N	N	N/A	None	2	3 way stop
Stanford & 32 nd	Y	0 / 4	N	N	N/A	None	4	2 way stop
Griffith & 29 th	Y	1 / 4	N	N	N/A	None	1	4 way stop
Griffith & 31 st	Y	0 / 4	N	N	N/A	None	4	2 way stop
Griffith & 27 th	N	0 / 4	N	N	N/A	None	4	2 way stop
Maple & 30 th	N	4 / 4	N	Y	N	None	0	
Adams & Trinity	N	1 / 4	1	N	N/A	Ped x-ing signs	4	2 way stop
San Pedro & Adams	N	4 / 4	N	Y	Y	None	2	Not count- down signal

As can be seen from this data, the environment for pedestrians near the project site is generally poor. Many intersections lack marked crosswalks. Almost none of the marked crosswalks have ladder markings, which make pedestrian crossings more visible for drivers. Few of the intersections have traffic signals and only one of those with a traffic signal had a designated signal for pedestrians (but not a count-down signal). Few traffic calming features or traffic safety features exist. A significant number of the intersections that were assessed do not have curb ramps for wheelchairs or strollers. These conditions make walking unattractive and unsafe.

Figure 2-4: Routes to the 28th Street Elementary School



Below are some photos of the intersections assessed for pedestrian quality described above. In these photographs, note:

- the lack of controlled intersections;
- intersections without crosswalks;
- many crosswalks without ladders;
- lack of pedestrian signal heads at intersections with traffic lights.







Traffic Volume

The Los Angeles Department of Transportation's Traffic Survey Section collects, and makes available, data from traffic count studies in the city. Traffic count data from studies between 2001 and 2008 were obtained and reviewed for this HIA.

Seven traffic count studies were conducted for traffic moving north and south on San Pedro Street. One of these studies was at the intersection of San Pedro and 32nd Street, adjacent to the project site, and three studies were conducted at the intersection of San Pedro and 28th Street, one block from the project site. The remaining three studies were at Adams Blvd and at Washington Blvd, within a ¼ mile and a ½ mile of the project site, respectively. These studies showed that between 20,000 and 25,000 vehicles pass the project site each weekday on San Pedro.

Six traffic count studies were conducted for traffic moving north and south on Griffith Avenue. One of these studies was conducted for the intersection of Griffith and 29th Street, immediately adjacent to the project site. The remaining studies were within a ½ mile of the project site. These studies show that between 6,000 and 11,000 vehicles pass the project site each weekday on Griffith.

Other traffic count studies near the project area include four on Broadway, five on Adams, and six on Jefferson. Between 16,000 and 19,000 vehicles travel north/south on Broadway daily near the site, between 15,000 and 23,000 vehicles travel east/west on Adams daily, and between 12,000 and 22,000 travel east/west on Jefferson daily.

Public Transportation

The Los Angeles County Metropolitan Transit Authority (LAMTA) and the City of Los Angeles Department of Transportation (LADOT) operate the city's public transportation system. LAMTA runs Metro bus and rail lines. LADOT operates DASH bus lines, the second largest bus fleet in Los Angeles County next to LACMTA.

The Metro Blue Line, a limited rail system, is relatively accessible from The Crossings development area, albeit mostly beyond walking distance. San Pedro Station, the closest, is 0.9 mile away from The Crossings development area and accessible only on foot. About 1.5 miles away, both Grand and Washington stations are accessible by public transit. Slightly farther away (1.6 miles), Vernon station is also accessible by public transit. Bike racks are available only at Grand station. Several stations of both the Red and Purple Lines are somewhat farther away: Perishing Square station, 2.8 miles away and accessible by public transit; Westlake/MacArthur 2.7 miles away, also accessible by transit; both 7th Street/Metro Center and Civic Center stations, 3.3 miles away and also accessible by public transit. Therefore, whether the Metro is accessible depends on how efficiently transit buses connect The Crossings area's residents to these stations.

Metro trains run with reasonable frequencies. Blue-line trains run at 5- to 15-minute intervals on weekdays, depending upon the time of the day, and at 12- to 20-minute intervals on weekends. Red and Purple lines run somewhat more frequently, at 4- to 10-minute intervals on weekdays and 4- to 12-minute intervals on weekends.

The main bus lines providing service to the project area are: 352 on San Pedro Street; 55 and 355 on East Adams Boulevard; 53 and Metro Rapid 753 on Central Avenue; and 102 on East Jefferson Boulevard. Most of these bus lines have stops just a few blocks away from the project site, with the exception of the 102 that runs along East Jefferson Boulevard, almost ten blocks away. Therefore, it appears that bus transit is relatively accessible to the project area's residents.

According to the information provided by LAMTA, Metro bus service intervals in the vicinity of The Crossings development area vary a great deal (see Table 3 below). Understandably, most of them run more frequently during peak hours on weekdays and less frequently during off-peak hours and on weekends. Unless noted in Table 3, most Metro buses run from early morning (4 to 5 a.m.) to late at night (9 p.m. to close to midnight). Line 55 runs most frequently, every 3 minutes during peak hours and every 15 minutes during off-peak hours, and every 10-15 minutes on weekends. Lines 53 and 753 also run relatively frequently during weekday peak hours, at intervals of 6 to 10 minutes, but less frequently during off-peak hours at intervals of 20 minutes. Lines 102 and 352 services are least frequent, with 30-35 minute intervals on weekdays, and the latter does not run off-peak hours. Lines 53 and 102 run infrequently on weekends, at a 45-minute interval and the 753 does not run on weekends.

Table 2-3: Metro and DASH Bus Services in the Crossings Development Area

	Route	Services
Metro Bus Routes	53	Every 6-10 minutes on weekdays (peak hours) Every 20 minutes on weekdays (off-peak hours) Every 45 minutes on weekend (all day)
	55/355	Every 3 minutes on weekdays (peak hours) Every 15 minutes on weekdays (off-peak hours) Every 10 minutes on weekend (peak hours) Every 15 minutes on weekend (off-peak hours)
	102	Every 30 minutes on weekdays Every 45 minutes on weekend
	352	Every 35 minutes on weekdays (peak hours). No service off-peak hours on weekdays No service on weekend
	753	Every 10 minutes on weekdays (peak hours) Every 20 minutes on weekdays (off-peak hours) No service on weekend
DASH Bus Routes	King-East Route	Every 20 minutes on weekdays (7 a.m. - 7:35 p.m.) Every 20 minutes on Saturday (9 a.m. - 6:30 p.m.) No service on Sunday
	Downtown Los Angeles Route E	Every 5 minutes on weekdays (6:30 a.m. - 7 p.m.) Every 6 minutes on Saturday (6:30 a.m. - 5 p.m.) Every 6 minutes on Sunday (10 a.m. - 5 p.m.)
	Downtown Los Angeles Route F	Every 10 minutes on weekdays (6:30 a.m. - 6:30 p.m.) Every 20 minutes on weekend (10 a.m. to 5:30 p.m.)

In addition to Metro rail and bus services, DASH bus routes are also relatively accessible to residents of The Crossings site. DASH King-East Route and Downtown Los Angeles Route E run relatively close to the project site but their closest stops are several blocks away. Somewhat farther away, DASH Downtown Los Angeles Route F is also accessible. While Metro bus routes reach more remote destinations and serve longer hours, DASH lines allow patrons to reach more local locations in the neighborhood. With a low fare of 25 cents, DASH bus services can be particularly useful for low-income residents who do not own cars by increasing the access to neighborhood locations, helping them shop for groceries and other daily necessities, take children to school, and visit doctors, etc.

The extent to which public transit is a convenient and reliable means of transportation for The Crossings area's residents depends on the bus lines they use, how far they live from them, if they have to make further transit connections, and how efficiently the connections are made. Given that only limited areas are accessible by Metro in the Los Angeles metropolitan area and a limited number of bus lines are relatively easily accessible to the project area's residents, public transit may or may not be a reliable means of transportation for them, depending upon the destinations they need to reach.

The City of Los Angeles operates bus stops, and is responsible for bus shelters and benches in The Crossings area. According to accounts from the area's residents, most of the bus stops are unsheltered, similar to the one that appears in the picture below. As illustrated by

the pictures that follow, the few bus shelters that have been installed tend to be small and equipped only with unsightly and uncomfortable metal benches with no back rests and with limited space for seating.





C. Analysis

The advantages of walkability, bikeability and accessible public transit in a community are well documented. From a health perspective, they include increased physical activity of residents, increased social cohesion, and increased access to neighborhood resources like parks, schools, shops, and services.

Physical Activity

The 1996 Surgeon General's report found that exercise prolongs life and prevents diabetes, high blood pressure, and colon cancer; that exercise controls weight, improves mobility in the elderly, and prevents falls; and that exercise reduces feelings of depression and anxiety and promotes psychological well-being.² The report concluded that regular physical activity improves health. Consistent with the findings of this report, the Centers for Disease Control and Prevention (CDC) recommend that adults should either engage in moderate exercise (e.g., walking briskly) for at least 30 minutes 5 days a week or in vigorous exercise (e.g., jogging) for at least 20 minutes 3 days a week. Children should get some combination of moderate and vigorous exercise for at least one hour a day. However, over half of adults and over one third of high school students in the U.S. do not get as much exercise as the Surgeon General recommends. While individuals must take some responsibility for this, environmental factors, such as a lack of walkable neighborhoods or lack of places for people to exercise, must also be addressed in order to promote physical activity.

Transportation and land use patterns can have beneficial effects on health by encouraging physical activity and walking for leisure.³ A "walkable," "complete," or "livable" neighborhood, characterized by mixed residential and commercial uses with easy access to a variety of food and retail options, parks and open space, and modes of transport, can lead to more exercise and less obesity by significantly reducing the need to drive.⁴ Other traffic variables that encourage walking on streets include traffic calming measures, street connectivity, access to public spaces, well-maintained and well-lit sidewalks, traffic conditions that encourage maximum pedestrian visibility to drivers, safety from crime, and the presence of well-marked bike lanes.^{5 6 7} Several studies have quantified the health benefits of walkable neighborhoods:

- One study shows that people walk an average of 70 minutes more per week in pedestrian-oriented neighborhoods.⁸
- A study in the US showed that each additional hour spent in a car per day was associated with a 6% increase in the likelihood of obesity. Each additional hour walked per day was associated with a 4.8% reduction in the likelihood of obesity.⁹
- In a study in California assessing vehicle miles traveled and obesity, counties with the highest average amount of vehicle miles traveled were significantly associated with the highest average rank of obesity.¹⁰
- Americans who use public transit spend a median of 19 minutes daily walking to and from transit; 29% achieve more than or equal to 30 minutes of physical activity a day solely by walking to and from transit, enabling them to reach the CDC recommended amount of physical activity (30 minutes a day, five times a week).¹¹

Pedestrian Safety

There is a statistically significant relationship between traffic volume and the number of vehicle collisions involving a pedestrian.^{12 13 14 15} Similarly, there is a significant relationship between traffic speed and pedestrian collisions.¹⁶

A neighborhood with features that make the pedestrian environment unsafe, such as high traffic volumes and speeds, narrow or degraded sidewalks, poorly connected streets, and a lack of lighting, is likely to reduce walking on residential streets.^{17 18 19} Marked crosswalks in uncontrolled intersections (i.e., those without traffic lights) have been associated with *higher* rates of pedestrian injuries in some studies.²⁰ This may be due to pedestrians feeling a false sense of security when crossing in a marked crosswalk. The risk of pedestrian injuries may discourage walking as a mode of transport, and negatively impact physical activity levels.

Social Cohesion

Social cohesion is another benefit of a walkable neighborhood. Social networks and interaction have been linked to improvements in physical and mental health through multiple mechanisms.²¹ Research has shown that traffic and pedestrian environment factors influence social cohesion. A study of New York City neighborhoods found that, compared to those living on streets with low traffic volumes, residents living on streets with higher volumes of traffic harbor more negative perceptions of their blocks and possess fewer relationships with neighbors.²² Another study that quantified pedestrian injuries concluded that areas with high concentrations of road traffic injuries in Cuernavaca, Mexico were characterized by: 1) the view that public roads serve the sole purpose of transportation and not of providing a communal space; 2) uncooperative behavior among residents; and 3) high levels of residential instability.²³ In his seminal 1980 study, Appleyard found that people living on a street with lighter traffic had more friends and acquaintances on the street than did people living on a street with heavier traffic to conclude that the risk of danger to children from traffic hazards is the biggest threat to residential and street life.²⁴

Community Perspectives on Pedestrian Safety, Walkability and Bikeability

Community residents living in the vicinity of The Crossings expressed concern about the lack of walkability and pedestrian safety in their neighborhoods. When asked about activities that community members did with their families outside of their homes, only about one third of local residents who responded to the community survey reported that they took walks. Only 27% of survey respondents indicated that their neighborhoods were walkable or bikeable. When asked about the reasons why their neighborhoods were not walkable or bikeable, large numbers of respondents pointed to excessive traffic, crime and/or sidewalk conditions (e.g., narrow and/or broken sidewalks), and lack of adequate lighting. Some respondents believed that unsafe intersections, lack of traffic signals and features that help pedestrians cross streets safely, speeding or reckless drivers, air quality, the presence of too many trucks, the lack of bicycle lanes, the lack of traffic calming measures, and high incidence of pedestrian and bicyclist injuries and fatalities in recent years also make the environment unfriendly to walking and biking.

Pedestrian Safety, Walkability and Bikeability: Conclusions

Results from the community survey and the existing conditions described above indicate that the area around The Crossings is not conducive or safe for those who would like to walk or bike in the neighborhood.

Development of The Crossings will bring more people to live in the neighborhood. If left unmitigated, the likely results of having more people in this pedestrian unfriendly environment are:

- Increased fatalities and injuries from vehicles colliding with pedestrians and bicyclists;
- Continued lack of physical activity;
- Continued lack of social cohesion;

Potential improvements that The Crossings development could bring to the pedestrian environmental include:

- Advance limit/yield lines at marked crosswalks
- Corner bulb-outs (extensions of the sidewalks at intersections that reduce the distance pedestrians must cross)
- Signals and markings at crosswalks (preferably with a pedestrian countdown signal - especially when there are more than 2 lanes of traffic)
- Keeping driveway cuts to a minimum of 4 or fewer per street segment
- Median refuge islands
- Pedestrian-oriented building access
- Pedestrian scale design on building frontages
- Pedestrian scale lighting on private buildings and/or on public streets
- Pedestrian specific building entrances
- Public art in streetscape
- Public seating in streetscape
- Restaurants, retail uses and historical sites located in/near project area, approximately one destination per block
- Safe routes to schools or other key pedestrian destinations, including senior facilities, health care, grocery stores, and public transit stops/stations
- Sidewalk curb cuts for pedestrians at intersections and other pedestrian street crossings
- Sidewalks free of impediments and cracks (so that people may walk and push baby strollers, etc. safely)
- Sidewalks with a continuous curb with appropriately placed curb cuts for people with disabilities
- Street trees, planters, and gardens included in streetscape
- Improved street cleaning - including trash can locations, graffiti removal where applicable
- Signage for pedestrians, specific to the neighborhood/street - potentially including area maps

Similarly, there is a long list of traffic calming interventions to slow traffic speeds that could be implemented to improve pedestrian safety and walkability in the area around The Crossings. The National Cooperative Highway Research Program recently published a State of the Knowledge Report on crash reduction factors for traffic engineering.²⁵ The report summarizes the best evidence on the effectiveness of diverse interventions. While the report reviews the effectiveness of interventions on motor vehicle accidents overall, it includes a number of studies specifically focused on effects on pedestrian injuries. Table 4 describes the findings in the report.

Table 2-4: Effectiveness of Traffic Interventions

	Level of Predictive Certainty	Accident Modification Factor
Intersection Treatments		
Install a roundabout	High	0.12-0.95
Add exclusive left-turn lane	High	0.42-0.81
Add exclusive right-turn lane	High	0.83-0.96
Install a traffic signal	High	0.33-1.5
Remove a traffic signal	High	0.69-0.82
Modify signal change interval	Medium-High	0.63-1.12
Convert to all-way stop control	Medium-High	0.28-0.87
Convert stop-control to yield-control	Medium-High	2.37
Install red-light cameras	Medium-High	0.84-1.24
Roadway Segment Treatments		
Narrow lane widths to add lanes	Medium-High	1.03-1.11
Add passing lanes (two-lane roads)	Medium-High	0.65-0.75
Add two-way left-turn lane (TWLTL)	Medium-High	
Increase lane width	Medium-High	
Change shoulder width and/or type	Medium-High	See formula
Flatten horizontal curve	Medium-High	See formula
Improve curve super elevation	Medium-High	See formula
Add shoulder rumble strips	Medium-High	0.82-0.87
Add centerline rumble strips	Medium-High	0.75-0.86
Install/upgrade guardrail	Medium-High	0.53-0.56
Install raised medians at crosswalks	Medium-High	Marked Crosswalks= 0.54 Unmarked crosswalks = 0.61

Source: The National Cooperative Highway Research Program - State of the Knowledge Report

While it is clear that not all of these interventions for improving the pedestrian environment and calming traffic are relevant for The Crossings project area, and the developer does not necessarily have the ability or responsibility to make these improvements, Urban Housing Communities and the city of Los Angeles should consider implementing some of these measures in order to help the neighborhood move toward achieving the many federal, state, and local standards regarding pedestrian safety and walkability that are listed in Appendix A.

Public Transportation

A healthy and accessible public transportation system can decrease vehicle miles traveled and encourage more physically active forms of transport. Workers with access to public transit are more likely to walk, bike, and take public transit to work than those without, and the availability of public transportation can decrease the distance a family drives.^{26 27} In the San Francisco Bay Area, the counties with more access to public transportation have the lowest vehicle miles traveled (VMT) per day.²⁸ Americans who use public transit have been found to be more physically active, spending a median of 19 minutes per day walking to and from transit.²⁹ Each additional hour walked per day is associated with a 4.8% reduction in the likelihood of obesity.³⁰

Transit-oriented development encourages residents to use of public transit. In survey of people who moved to a transit-oriented development in California, 56% said that they used public transit more, and 93% indicated that they used transit the same or more.³¹ Well-designed, mixed-use development around transit nodes can increase patronage as much as 5-6 times compared to development away from transit;³² close (i.e., <.5 mile) proximity of dense and mixed-use development to public transit decreases the distance between people's residential, employment, and other (e.g., shopping, errands, social) activities and increases walking as a means of transportation.³³

Community Perspectives on Public Transportation

To a large extent, using public transit is not a matter of health-related or lifestyle choice but one of necessity to many residents in The Crossings development area. Almost half of (46%) of survey respondents reported that they did not own a car. Thirty-nine percent indicated that they rely on the bus as a chief mode of transportation, 43% said that they rely on a car or motorcycle, and only 18% responded that they most often walk or bike to get from place to place. Although several local residents who responded to the community survey indicated that transit is “not close enough to home” for them, 75% of the survey respondents reported that the existing public transit system is easily accessible. A lower proportion (60%) indicated that there was sufficient public transit to get them where they needed to go (work, shopping, etc.). The main issue with regard to transit that survey respondents reported most often was that it was “not frequent enough,” to the extent that at least one person reported having to “wait an hour” for transit.

Public Transportation: Conclusions

Plans for The Crossings development do not currently include efforts to increase bus lines or other modes of public transportation. However, since many of the residents living in the vicinity of The Crossings rely on public transit as their chief mode of transportation, improving the quality of transit services in this area should be given a high priority in plans for new developments, such as The Crossings.

The 2003 Governors Environmental Goals and Policy Report recommends that the public should be provided with a transportation network that increases mobility choices—including public transportation, walking, and biking.³⁴ A goal of Caltrans Strategic Plan 2007-2012 is to Maximize transportation system performance and accessibility.³⁵ The Metropolitan Transportation Authority's 2025 Regional Transportation Plan, a long-range blueprint for transportation improvements in the Sacramento region, includes goals for improving the ease and convenience of using the transportation system and of achieving fairness in the planning, funding, and operation of the region's transportation system.³⁶ These goals and standards are not currently being met in the area around The Crossings development site.

The need for increased public transportation such as additional bus lines and more frequent bus service are likely to persist as The Crossings development is constructed. Once The Crossings is built, more residents will likely live in the area, and thus create a higher demand for transit services. With additional assessment of the area's transit needs, specific targets for system improvements in the area can be made.

D. Recommendations: Health-Promoting Mitigations for Pedestrian Safety, Neighborhood Walkability & Public Transit

Based on evidence linking walkability to health and data gathered about the pedestrian environment around The Crossings and the 29th St./ San Pedro St area, we recommend the following mitigations for pedestrian and bicycle safety and the improvements to the pedestrian environment at The Crossings project site.

- UHC should install wide sidewalks and ensure that the sidewalks have curb ramps for wheelchairs and strollers;
- UHC should install lighting on the streets;
- UHC should ensure that the paths/green-space behind the new buildings are accessible to the public as an alternative safe walking route.
- UHC should place features on the streets, along pathways and in green space, such as benches and stools, that encourage the use of the space throughout the day in order to decrease crime and improve safety. *(See also Recommendations in the Parks and Recreational Facilities Section)*
- UHC and LA ACORN should initiate discussions with residents living (or who will be living) at The Crossings about how to establish a “neighborhood watch” type of program that will develop a safety plan for The Crossings and surrounding areas. This group should include particular attention to safety along pedestrian pathways, streets, and in other public spaces in and around The Crossings. *(See also Recommendations in the Parks and Recreational Facilities Section)*
- UHC and ACORN members should work with the City of Los Angeles to install safety features in and around The Crossings development. These features could include:
 - Traffic signals with pedestrian countdown signals AND crosswalk markings with crosswalk ladders;
 - Road signage indicating the presence of children, pedestrians and bicyclists;
 - Traffic calming features/pedestrian environmental improvements such as curb extensions, median islands, reduced speed limits, and street landscaping;
 - Improved sidewalks free of cracks and impediments for pedestrians; and
 - Bike lanes.
- UHC and ACORN members should work with the City of Los Angeles to improve specific routes through the neighborhood (e.g., to parks or to schools). This could be done by improving sidewalks and planting street trees, for example.

To help improve transit accessibility and enhance transit-use experiences for residents living in the area surrounding The Crossings development, we recommend the following:

- UHC and ACORN members should work with LAMTA to increase the number and frequency of Metro bus lines that serve the project area, especially during off-peak hours and on weekends.
- UHC and LA ACORN should work with LADOT to re-route the DASH bus lines that currently run relatively close to the Crossings site in order to better serve the Crossings project area.
- More bus shelters should be built in The Crossings project area.
- In order to better understand the transportation needs of the community living in close proximity to The Crossings development, LA ACORN should design and administer an assessment of transit needs, and use the results to inform future plans for transportation enhancements.

E. Conclusions

This analysis concludes that The Crossings/ 29th St./ San Pedro St. project area is in need of significant improvements in order to enhance walkability, bikeability and access to public transit. Given the presence of an elementary school adjacent to the project site, pedestrian safety should be an especially important consideration in the design of The Crossings. The project design can impact the neighborhood walkability and bikability in a limited way by improving the environment directly adjacent to the project area, but UHC and LA ACORN should also work to encourage the City of Los Angeles to make improvements to the intersections near the project and to others in the surrounding neighborhoods as well. With the cooperation of the county's Metropolitan Transportation Authority, transit services can be improved for the area's residents by increasing bus lines and shelters, and providing more frequent bus services.

References

- ¹ Loukaitou-Sideris, A. et al. 2007. Death on the Crosswalk: A Study of Pedestrian-Automobile Collisions in Los Angeles. *Journal of Planning Education and Research*. 26: 338.
- ² Physical Activity and Health: A Report of the Surgeon General is available at <http://www.cdc.gov/nccdphp/sgr/sgr.htm>
- ³ Frank, Lawrence, Sallis JF, Conway T, Chapman J, Saelens B, Bachman W (2006). "Multiple Pathways from Land Use to Health: Walkability Associations With Active Transportation, Body Mass Index, and Air Quality." *Journal of the American Planning Association* Vol. 72 No. 1.
- ⁴ Handy, S. 1996 Understanding the link between urban form and non-work traveling behavior. *Journal of Planning Education and Research*. 15:183-98.
- ⁵ Li, F., et al. "Multilevel Modelling of Built Environment Characteristics Related to Neighbourhood Walking Activity in Older Adults." *Journal of epidemiology and community health* 59.7 (2005): 558-64.
- ⁶ Ewing R, Frank L, Kreutzer R. Understanding the Relationship Between Public Health and the Built Environment: A Report to the LEED-ND Core Committee. 2006.
- ⁷ Frank, Lawrence, Andresen, Martin and Schmid, Tom (2004). Obesity Relationships With Community Design, Physical Activity, and Time Spent in Cars. *American Journal of Preventive Medicine* Vol 27. No 2. June, 2004, pp. 87-97.
- ⁸ Saelens, B. E., et al. "Neighborhood-Based Differences in Physical Activity: An Environment Scale Evaluation." *American Journal of Public Health* 93.9 (2003): 1552-8
- ⁹ Frank L, Andresen MA, Schmid TL. 2004. Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine* 27(2):87-96.
- ¹⁰ Lopez-Zetina J, Lee H, Friis R. 2006. The link between obesity and the built environment. Evidence from an ecological analysis of obesity and vehicle miles of travel in California. *Health Place* 12(4):656-64.
- ¹¹ Besser LM, Dannenberg AL. 2005. Walking to public transit: Steps to help meeting physical activity recommendations. *American Journal of Preventative Medicine* 29(4):273-280.
- ¹² Levine, N, Kim, K, and Nitz, L. 1995a. Spatial analysis of Honolulu motor vehicle crashes: I. Spatial patterns. *Accident Analysis & Prevention*, 27 (5): 663.
- ¹³ Roberts, I et al. 1995. Effect of Environmental factors on risk of injury of child pedestrians by motor vehicles: A case-control study. *British Medical Journal*. 310: 91.
- ¹⁴ Jackson, R. and Kochtitzky. 2001. Creating a healthy environment. *Sprawl Watch Clearinghouse Monograph*, Washington, D.C. (<http://www.sprawlwatch.org>).
- ¹⁵ Hess, P.M. et al. 2004. Pedestrian safety and transit corridors. *Journal of Public Transportation*. 7 (2): 73.

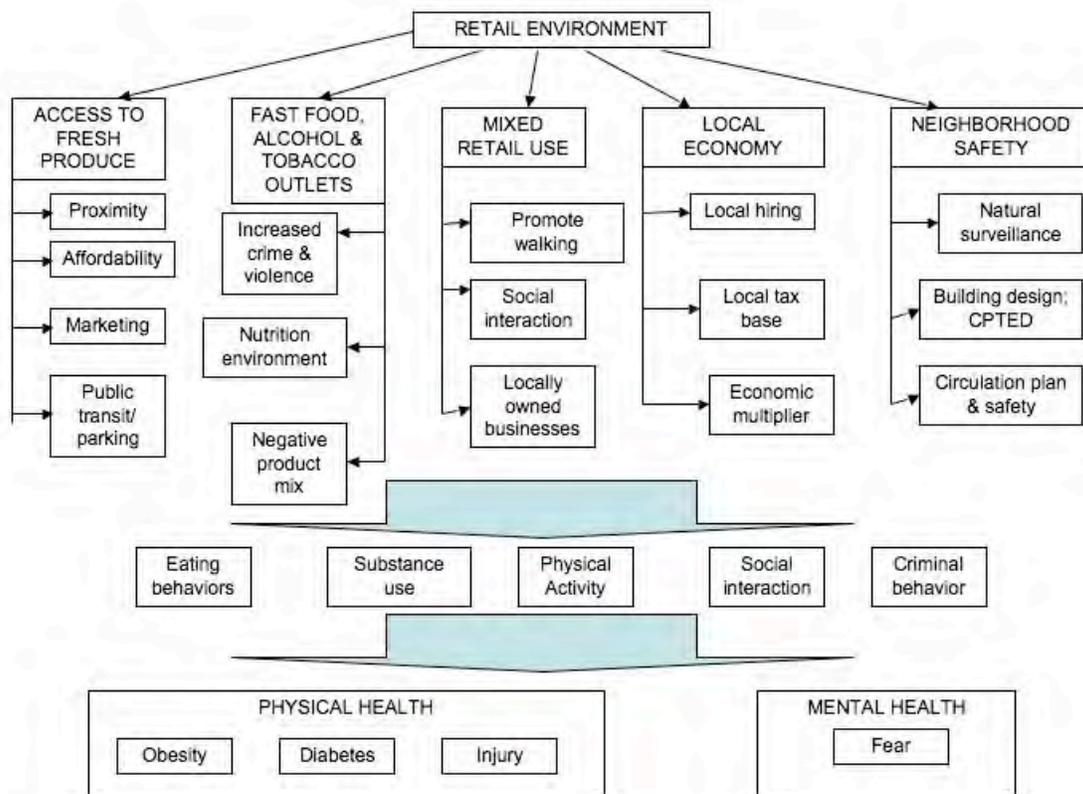
-
- ¹⁶ Jacobsen, P. 2000. Child pedestrian injuries on residential streets: Implications for traffic engineering. *IETE Journal on the Web*. (February): 71-75.
- ¹⁷ Centers for Disease Control and Prevention (CDC). "Barriers to Children Walking and Biking to School--United States, 1999." *MMWR.Morbidity and mortality weekly report* 51.32 (2002): 701-4.
- ¹⁸ Li, F., et al. "Multilevel Modelling of Built Environment Characteristics Related to Neighbourhood Walking Activity in Older Adults." *Journal of epidemiology and community health* 59.7 (2005): 558-64.
- ¹⁹ Transportation Alternatives. *Traffic's Human Toll: A Study of the Impacts of Vehicular Traffic on New York City Residents.*, 2006.
- ²⁰ Zegeer, C., et al. 2002. Safety effects of marked vs. unmarked crosswalks at uncontrolled locations – Executive summary and recommended guidelines. Reprint no. FHWA-RD-01-075. Washington, D.C.: Federal Highway Administration.
- ²¹ Berman LF, Glass T, Brisette IC, Seeman TE. 2000. From social integration to health: Durkheim in the new millennium. *Social Science and Medicine* 51:843-857.
- ²² Transportation Alternatives. *Traffic's Human Toll: A Study of the Impacts of Vehicular Traffic on New York City Residents.*, 2006.
- ²³ Inclan, C., M. Hijar, and V. Tovar. "Social Capital in Settings with a High Concentration of Road Traffic Injuries. the Case of Cuernavaca, Mexico." *Social science & medicine* (1982) 61.9 (2005): 2007-17.
- ²⁴ Appleyard, Donald. *Livable Streets*. London: University of California Press, 1981.
- ²⁵ NHTSA. *Crash reduction factors for traffic engineering and intelligent transportation system (ITS) improvements: state-of-knowledge report Research Results Digest 299 National Cooperative Highway Research Program*; 2005. Available at: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_299.pdf.
- ²⁶ Hefferman K. 2006. *Preserving and Promoting Diverse Transit-oriented Neighborhoods*. Center for Transit Oriented Development. Available at www.cntd.org/repository/diverseTOD_FullReport.pdf
- ²⁷ Metropolitan Transportation Commission. March 2006. *Richmond Metrowalk Survey Summary*. Unpublished results.
- ²⁸ San Francisco Department of Public Health. *Healthy Development Measurement Tool*. Available at http://www.thehdmt.org/objective.php?objective_id=6
- ²⁹ Besser LM, Dannenberg AL. 2005. Walking to public transit: steps to help meeting physical activity recommendations: *American Journal of Preventative Medicine* 29(4): 273-280.
- ³⁰ Frank L, Andresen MA, Schmid TL. 2004. Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine* 27(2): 87-96.
- ³¹ Metropolitan Transportation Commission. March 2006. *Richmond Metrowalk Survey Summary*. Unpublished results.
- ³² Cervero R. 2005. *Transit Oriented Development in the United States: Experiences, Challenges and Prospects*. TCRP Report 102. Washington, DC. Transportation Research Board.
- ³³ Ewing R, Frank L, Kreutzer R. *Understanding the Relationship between Public Health and the Built Environment: A Report to the LEED-ND Core Committee*. 2006.
- ³⁴ State of California Governor's Office of Planning and Research, November 10, 2003. *Governor's Environmental Goals and Policy Report*.
- ³⁵ Caltrans. 2007. *Caltrans Strategic Plan 2007-2012*. The California Dept. of Transportation.
- ³⁶ MTC. 2001 *Regional Transportation Plan (RTP)*. Metropolitan Transportation Commission. Available at http://www.mtc.ca.gov/library/2001_rtp/index.htm.

29th St. / San Pedro St. Area Health Impact Assessment

Chapter 3: Health Services and Food Retail

Health Pathways

The type of health services and food retail that are located in a neighborhood can affect the resources that are available to residents, and ultimately impact their health outcomes. This analysis of health services and food retail for The Crossings at 29th Street Development Project (“The Crossings”) considers the ways in which the project could affect the availability and accessibility of healthy food retail as well as health services in the project area. The following pathway diagram depicts the relationship between access to goods and services and health.



A. Introduction

The presence of retail and public services such as medical facilities and grocery stores can help to provide residents with the resources they need to make healthy choices in their lives. The location of these resources and their proximity to where people live help determine whether people use them, how often, and how they access them (e.g., by walking or driving). Additionally, some retail services are actually unhealthy – such as fast food and alcohol outlets. This section considers the relationship between health and access to health services and healthy food retail. The following questions about access to health services and healthy food retail and were explored in this Health Impact Assessment:

- *Do existing health services meet the needs of the community in The Crossings project area?*
- *How could The Crossings development help to improve the accessibility of and knowledge about health services for local residents?*
- *How accessible are healthy food options in areas around The Crossings project site?*
- *How could The Crossings help to improve the accessibility and availability of healthy food choices for local residents?*

B. Existing Conditions

Morbidity and Mortality

The five leading causes of death in the 29th Street Development project area are: 1) Coronary Heart Disease, 2) Diabetes, 3) Homicide, 4) Lung Cancer, and 5) Pneumonia/Influenza.¹ According to the 2005 Los Angeles County Health Survey, the percentage of people in the 90011 zip code (where The Crossings development will be located) who report a self-perceived fair/poor health status is more than twice that in Los Angeles County.²

Fair/Poor Health Status (self-perceived)	Percent	Estimated #
LA County	20.6	1,498,000
90011 Zip Code	44.8	30,000

The same survey found that an estimated 37% of the population in the 90011 zip code is obese and 39% is overweight, compared to a respective 21% and 35% county-wide.³ Additionally, the percentage of people who suffer from hypertension in this zip code is nearly 10% greater than in the rest of Los Angeles County, and the percentage of chronic respiratory disease in the area nearly doubles the percentage found in the County’s population.

Results of the community survey administered to residents living in the area where The Crossings development will be located indicate that chronic health conditions such as asthma, obesity and cancer are highly prevalent. Other serious medical concerns that survey respondents mentioned facing include diabetes, high blood pressure and chronic stress.

Obesity	Percent	Estimated #
LA County	20.9	1,366,000
90011 Zip Code	37.0	19,000

Overweight	Percent	Estimated #
LA County	35.5	2,325,000
90011 Zip Code	38.8	20,000

More than 19% of parents (of children 0-17 years old) in the 90011 zip code reported the health status of their children as fair or poor, compared to only 12.7% in the county.⁴ The number of children with special health care needs in this zip code also exceeds that in the county by 3.5%.⁵

Fair/Poor Health Status for Children	Percent	Estimated #
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LA County	12.7	355,000
90011 Zip Code	19.7	9,000

Children W/ Special Health Care Needs	Percent	Estimated #
LA County	15.7	421,000
90011 Zip Code	19.2	8,000

Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. 2005 Los Angeles County Health Survey

Health Care

Fifteen percent of adults in the U.S. lack a usual source of health care. This equates to more than 40 million people that have no particular doctor's office, clinic, health center, or other place where they regularly go for health care advice.⁶

In California it is estimated that approximately one-quarter of all individuals under age 65 (approximately 6.4 million people) were without health insurance for all or some of 2007, and, considering the current economic downturn, it is estimated that the number of uninsured Californians will increase from these 2007 estimates.⁷ According to the community survey administered in The Crossings project area during the summer of 2008, an overwhelming 70% of local residents indicated that they did not have health insurance.

According to the California Nutrition Network, Network for a Healthy California, a number of health care facilities are located within the vicinity of The Crossings project site. The majority of these licensed healthcare facilities are community clinics.⁸ Although the only health care clinic that is within walking distance (1/2 mile) of the project site is the Central Neighborhood Health Foundation, the following health care facilities are located within a two-mile radius of the project area:

- St. John's Well Child and Family Center
- Orthopedic Hospital Outpatient Medical Center
- La Clinica para las Mujeres
- BAART Southeast Health Clinic
- South Central Family Health Center
- California Family Care
- Cesar E. Chavez Multicultural Wellness Center
- JWCH Medical Clinic at the Weingart Center
- AIDS Healthcare Foundation (AHF)
- California Hospital Medical Center, Los Angeles
- South Central Family Health Center
- Eisner Pediatric and Family Medical Center
- Central Neighborhood Health Foundation

Other licensed specialized healthcare facilities located within two-miles of The Crossings project site include:

- Washington Plaza Dialysis Center
- Carabello Dialysis Clinic, Inc.
- Kedren Community Mental Health Center
- UCLA School of Nursing Health Center

- USC-University Park Health Center
- Los Angeles Dialysis
- California Kidney Care Center
- University Park Dialysis Center

The Community and Mission Hospital (E. Slauson) is located about four miles from the project area.

Healthy Food Retail

According to the National Center for Chronic Disease Prevention and Health Promotion Behavioral Risk Factor Surveillance System more than 70% of adults in Los Angeles County do *not* consume fruits and vegetables the recommended 5 or more times a day. Only 37.9% of 253 local residents surveyed in The Crossings' project area said that they eat fresh fruits and vegetables on a daily basis.

In South Los Angeles and areas of similar demographics in LA County, a study designed to assess the nutritional resource environment found that not only did residents in these communities have far fewer markets to choose from to buy their food, but that the choices available to them in local food markets were markedly less healthy than those that were available to residents in the predominantly white, affluent Los Angeles area of Westwood.⁹ A 2002 study also found that in Los Angeles, the higher the concentration of poverty as well as the higher concentration of African Americans and Latinos within a community, the fewer the number of supermarkets.¹⁰ For example, in 2002, each supermarket in Los Angeles County served 18,649 people, while in low-income communities of central Los Angeles one supermarket served on average 27, 986 people.¹¹ In the 52 square mile low-income area of central Los Angeles that was examined in this study there was a net gain of only one [grocery] store from 1995 to 2002.¹² In 2002, there were no supermarkets in the 90011 zip code where the 29th Street project development is located, and at the time the population in that zip code was 13% African American and 87% Latino.¹³

In South Los Angeles and similar low-income areas of LA and Long Beach, 95% of the retail food outlets are either local markets or convenience stores, while in the more affluent area of West Los Angeles nearly one-third of all retail food outlets are branches of large regional or national chains.¹⁴ As a result, residents in who would prefer to shop locally are more likely to be forced to shop at a market or convenience store rather than a large, chain supermarket. Of the existing grocery stores in South Los Angeles, one study found that fruits and vegetables, nonfat milk, low-fat snacks and meat were less often available than in they are in West Los Angeles. Specifically, at the time the study was conducted, less than 75% of markets in South LA and other similar communities sold fresh fruits or vegetables compared to over 90% of stores in West LA. Inventories also found the color, texture, consistency, damage and cleanliness for a variety of fruits and vegetables to be inferior in South LA (and similar communities) compared to West LA. Additionally, South LA stores were found to be less likely to carry foods designated for diabetics, or low-salt food options.¹⁵

The vast majority of grocery stores in the vicinity of The Crossings project area are small chains (that have between 5-9 stores), or other independent grocery stores and chains with less than 5 units. Of the 210 grocery stores that are listed as being located within a 2-mile radius of the project area, only 8 are considered to be large chains (with 10 or more stores).¹⁶

Included in these 8 large chains are Food 4 Less, a bulk/discount store with a limited variety of merchandise, Lee's Market & Liquor, which specifically advertises the sale of liquor, Family Market, Henry's Marketplace, and Ralph's. There are no large chain grocery stores within a one-mile radius of The Crossings project area.

While there are approximately 90 certified farmers markets in Los Angeles County, none of them are located within walking distance (1/2 mile) from The Crossings project area.¹⁷ The closest certified farmers markets are about two miles from the project site, and the nearest fruit and vegetable markets (two in total) are just about one mile away.¹⁸ Further from the project site (within a 3 mile radius), there are six certified farmer's markets, and a number of fruit and vegetable markets, however, lack of access to adequate transportation and poor pedestrian quality in the area are barriers that make these destinations difficult to reach.

Within a one-mile radius of the project site there are more than 200 stores/restaurants listed in the categories of convenience stores, other food retailer, fast-food chains, and independent or other small restaurant chains.¹⁹

C. Analysis

Health Care

The timely use of primary care has a role in preventing morbidity and hospitalizations from a number of chronic diseases, including asthma and diabetes. Research has specifically found that Federally Qualified Health Centers in medically underserved areas can lower preventable hospitalization rates.²⁰

Health Insurance

Access to health services including preventive care, primary care, and tertiary care often depends on whether a person has health insurance.^{21 22 23} Uninsured people are less than half as likely as people with health insurance to have a primary care provider, to have received appropriate preventive care, or to have had any recent medical visits. Lack of insurance also affects access to care for relatively serious medical conditions.²⁴ Evidence suggests that lack of insurance over an extended period significantly increases the risk of premature death, and that death rates among hospitalized patients without health insurance is higher than among patients with insurance.²⁵ Another study showed that among those without insurance, those who are chronically ill are even less likely than those with acute conditions to get the health care services they need.²⁶

Other Barriers to Health Care

In addition to a lack of insurance or underinsurance, barriers to obtaining health care services include a lack of appropriate referrals, travel distance to the provider, communication problems, child care limitations, lack of transportation, lack of time or information and unavailability of specialists.^{27 28 29} Additionally, people with a usual source of health care are more likely than those without a usual source of care to receive a variety of preventive health care services.^{30 31}

Community Perspectives on Health Services

Data from the survey of residents in The Crossings project area indicated that health services are a priority need for the community. Forty-eight percent of survey respondents shared that

they would like to see more health services (e.g., check-ups, immunizations, information on nutrition) in their community. Thirty-seven percent of survey respondents indicated that they do not think there are affordable and accessible health care clinics in their community, and 25% of survey respondents indicated that they do not know if affordable and accessible health care clinics exist near where they live. Specific comments indicated that health care clinics are too far from residents' homes. Additional responses from the survey mentioned a lack of accessible drug treatment/substance abuse programs and health clinics to treat depression, as well as other specific illnesses such as cerebral palsy.

Access to Health Services: Conclusions

In order for residents in The Crossings Development project area to obtain quality health care services, these services must be not only be accessible, but residents must also know about the availability of these services. For example, public awareness of how and whom to call for emergency assistance is crucial to improving health outcomes in emergency medical situations. Residents must also know where primary and specialty health services are offered, and what is needed in order to be eligible for these health services. The Crossings development is well positioned to facilitate communication between health service providers and local residents, providing information about locally available health care services, and also helping providers to understand the health care needs of the local community.

Lack of insurance is a barrier to accessing health services that impacts the population living around The Crossings project area. In order to address the barriers to accessing health services that this community faces, it is important that these barriers and their root causes are better understood. A health services needs assessment for the community living in proximity to The Crossings development would help to provide such additional information, and be an appropriate starting point for decision-making about ways that The Crossings can help to address local community needs around health care services.

Food Retail

According to the composite site plan for The Crossings at 29th Street, there are two one-story retail spaces at The Crossings that will be developed during Phase 1 and Phase V of the project.

While on the surface it may sound like there are an abundance of places where food can be accessed in The Crossings project area (see existing conditions for this chapter), the sheer number of food retail locations does not reflect any measure of the quality of the food that is available at these locations.

Lack of access to healthy food is one of the barriers, particularly for low-income communities, to healthy eating. Diet-related disease is one of the top sources of preventable deaths among Americans, with the burden of overweight and obesity falling disproportionately on populations with the highest poverty rates.^{32 33} It is well known that nutritious eating and regular physical activity aid in the prevention of chronic medical conditions, especially diabetes, cardiovascular diseases and cancers.³⁴ Furthermore, these behaviors can alleviate the effects of conditions that increase the risk for other poor health outcomes such as obesity.³⁵

Availability of Food Retail

The local environment has a direct influence on the type of food options that are available to households and individuals.³⁶ Improved nutritional health is one example of a consequence of food retail proximity, as, for example a neighborhood supermarket can increase access to and consumption of affordable, quality food. Examples of food retail that impacts health includes food-related businesses such as full-service supermarkets, small grocery stores, convenience stores, farmers markets, restaurants, cafes, fast food establishments, liquor stores, and bars. The choices that people make about what they consume on a day-to-day basis are influenced by the food options available at these locations.³⁷ Not all food facilities are the same, and even the food at chain businesses may vary from area to area. This variation in food options may reflect some degree of cultural variation, but may also reflect inequity.³⁸

The type of retail located in a neighborhood has the potential to impact the health of people in the area. For example, the density of liquor stores in an area is strongly associated with assault rates. One study found that each six additional liquor outlets accounted for one additional violent assault that resulted in at least one overnight stay in a hospital.³⁹ Crime and safety concerns create anxiety among businesses owners and create reluctance among potential retailers, and can therefore limit the potential for commercial revenue in low-income neighborhood economies.

By providing access to a greater variety of cheaper and healthier foods, including fresh fruits and vegetables, supermarkets can help to facilitate healthier dietary choices. Research has found that the presence of a supermarket in a neighborhood predicts higher fruit and vegetable consumption and a reduced prevalence of overweight and obesity.^{40, 41} A lack of supermarkets can lead to smaller stores being the main source of local groceries, or the need to drive to obtain groceries. Smaller retail food stores typically charge about 10% more for products than supermarkets.⁴² Such stores usually have less or no fresh produce available, and offer more processed foods.

For many low-income populations in urban areas, accessible and affordable nutritious food remains a significant unmet need. Low-income households often have little choice about where to purchase food. Such households often buy less expensive but more accessible food at fast food restaurants or highly processed food at corner stores. These types of foods are usually higher in calories but lower in nutritional value.⁴³ Consuming these types of foods is one of the causes of higher rates of obesity for many low-income populations.⁴⁴

Community Perspectives on Availability of Food Retail

Responses to the community survey indicate that residents in The Crossings project area do not feel that they have any or enough of, and would like to see more grocery and produce stores as well as healthy and affordable restaurants in their neighborhood. More than 66% of survey respondents indicated that grocery stores are a priority need for their community. A similar percentage of respondents indicated that they believe there are too many liquor stores in their neighborhood.

Availability of Food Retail: Conclusions

Improving the food environment around The Crossings by increasing the availability and accessibility of healthy foods, including fresh fruits and vegetables, is necessary in order to help to improve the health of the population living in this community. Having healthy food

options, as well as other needed community services, in close proximity to the site of the proposed new affordable housing would not only improve access to these goods and services, but may likely also promote other indicators of health. For example, increased physical activity such as walking and biking improves cardiovascular and respiratory health and reduces the risk of hypertension and obesity.⁴⁵ Fewer daily vehicle trips and miles traveled can reduce air and noise pollution, which subsequently impacts associated respiratory and noise-related health conditions. Improved community services can also increase possibilities for healthy and meaningful employment opportunities, increased interactions among neighbors and others on the street, and in turn improve neighborhood cohesion and safety.⁴⁶

Supporting the establishment and sustainability of retail and services that meet the health needs of residents in The Crossings project area can also have indirect positive effects on the community, such as deterring crime and improving safety by creating opportunities for natural public surveillance. For example, a vibrant neighborhood retail environment is one type of setting for social interaction, which can lead to less social isolation and less crime. Opinions about crime are strongly related to feelings about community, and having a sense of being part of the community has been shown to result in less fear.⁴⁷

Urban Housing Communities is well positioned to support the establishment of healthy food retail at the Crossings by dedicating the proposed retail space at the project site for this purpose. Until a healthy food retailer can begin operating on site at The Crossings, there are a number of temporary and additional ways that the development can improve local residents' access to healthy food.

Proximity to Retail Food

Using proximity to a full service supermarket as a proxy for food access, public health research has demonstrated that the retail environment has an impact on individual health. One study conducted in Los Angeles County concluded that longer distances traveled to grocery stores were associated with an increased body mass index.⁴⁸ With large retail food markets few and very far between, residents with limited healthy food retail must make decisions between long treks for healthy food for themselves and their families, or decidedly less healthy choices at their local retail food outlets.⁴⁹ These individuals must spend more time in their cars, on the bus, or on foot in order to obtain healthy food for their households.

Relying on cars to access day-to-day retail and public service needs also has adverse consequences on health via air pollution and noise levels. Ensuring complete neighborhoods with adequate retail and public services in close proximity to residents' homes can reduce reliance on cars for every day needs. Additionally, for residents without access to a car, having local retail (including healthy food options) in close proximity increases accessibility.

Proximity to Food Retail: Conclusions

Considering that more than 45% of 255 survey respondents in The Crossings project area indicated that they do not own cars, and more than 57% rely on public transportation, walking or biking to get from place to place, having healthy food retail and health services

that are accessible by walking, biking and public transportation is crucial in order to ensure that local residents have access to these resources.

While no available guidelines or standards exist for access to local retail services, the Healthy Development Measurement Tool (HDMT) development targets for neighborhood-serving retail typically advise development projects to be within a half-mile of supermarkets, retail food markets (including supermarket, produce store and other retail food stores), and eating establishments (restaurants and cafes).⁵⁰

D. Recommendations

Based on the connections between health and access to health services and healthy food retail, as well as local, statewide and national data, the community survey, and federal and local guidelines, the following recommendations have been developed in order to ensure that The Crossings is developed in a way that supports access to needed health services and healthy food retail for the local community.

Health Promoting Mitigations for Health Care

- UHC should consider working with LA ACORN to conduct a community needs assessment in order to better understand local residents' barriers to accessing needed health services. Factors that should be considered in this needs assessment include:
 - Cost
 - Lack of awareness/education about availability of health services
 - Services currently offered may not meet community needs
 - Cultural, linguistic and other barriers to access may also exist for this population
 - How lack of insurance affects lack of access to care for this community
- Once specific barriers to accessing health services are identified for The Crossings community, UHC and ACORN should work to build partnerships with local health care providers to facilitate residents' knowledge about and access to their services.
- Urban Housing Communities should work with LA ACORN to create a complete inventory of existing health service providers (starting with the list provided in the Existing Conditions section above), list the services they provide, and the qualifications needed in order for residents to access these services. This information about local health services should be made available to residents at The Crossing, and in public areas visible and accessible to residents living outside of housings at The Crossings.
- UHC should work with LA ACORN and other community partners to plan a semi-annual health fair for local providers to share information about their services at The Crossings. The health fair could be held in the multipurpose space or in the park/open space area of the project site.
- UHC should work with local emergency response personnel to ensure that steps are taken to facilitate efficient response to emergencies in and around The Crossings development. Additionally, UHC should provide information for local residents living in and around the new housing at The Crossings regarding the proper steps to follow when contacting emergency responders.

Health Promoting Mitigations for Healthy Food Retail

The following recommendations outline ways in which The Crossings can help to improve access to healthy food retail for local residents:

- UHC should designate one of the retail spaces at The Crossings for a small grocery store that primarily sells healthy foods, including fresh produce.
- UHC should consider using the multi-purpose space, retail development area, the 28th Street Elementary School to host a farmer's market on-site at The Crossings.
- UHC should designate a space at The Crossings where affordable food boxes of local, fresh produce from farmer's market vendors can be delivered for local residents to pick up on a weekly basis.
- UHC and ACORN should identify and work with local community partners that can offer cooking classes that focus specifically on preparing healthy and nutritious meals. These classes could be held in the multipurpose space at The Crossings.
- Until healthy food retail and/or a farmer's market is established near The Crossings, UHC should consider offering a regular van service for The Crossings residents to access farmers markets and grocery stores where healthy food options are available.
- UHC should consult local organizations and programs in and around Los Angeles City and County that focus on addressing health conditions related to healthy food access. The following are examples of such organizations:
 - Center for Food and Justice, Urban and Environmental Policy Institute, Occidental College;
 - Local community partners involved with the Healthy Eating Active Communities program sponsored by The California Endowment.
- UHC together with LA ACORN and other community partners should advocate for municipal support for grants and below-market-rate micro-loans that promote store transformations that increase their capacity to offer fresh, wholesome foods (from, for instance, liquor, cigarettes, and sweet- and fat-laden snacks to fresh produce, whole grain products, low-fat milk).⁵¹

E. Conclusion

An examination of the existing conditions in the area surrounding The Crossings/ 29th St./ San Pedro St. area shows that there is a clear need for improved access to health services and healthy food retail. While a number of health care service providers and clinics are located in close proximity to The Crossings, local residents have indicated that their health care needs are not being met. While one of the barriers to accessing health services may be lack of insurance, other issues that prevent community residents from receiving care must also be examined. Healthy food retail, on the other hand, is not abundant in the neighborhood where The Crossings is located. Residents in the area do not have the opportunity to conveniently access healthy food choices that are essential to positive health outcomes.

UHC, in its preliminary phases of design and development of The Crossings, has the opportunity to address some of the health care and nutritional needs of local community residents. Offering residents healthy food retail that is in close proximity to their homes, access to information about local health services, as well as additional assistance in receiving healthy food and quality health care, will also likely improve conditions such as social interaction and help to decrease in crime in the neighborhood.

The availability of multipurpose and park space at The Crossings presents an opportunity to bring health care information and health service providers to residents at The Crossings project site. The future retail space at The Crossings offers the opportunity for a grocery store with healthy and fresh produce to be permanently located at the project site. By considering the health care and nutritional needs of community residents in the design and development of these spaces at The Crossings and offering services and retail that local residents need most, this project has the potential to significantly improve health outcomes for this community.

Using the limited information about development plans that are available at this stage of development planning, and with the provision that UHC and LA ACORN are committed to working towards addressing priority health concerns, we recommend that health services and healthy food retail are made more accessible to local residents through the development of The Crossings.

References

¹ California Department of Health Services, Center for Health Statistics. 2005 Vital Statistics Master Death File.

² Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology. 2005 Los Angeles County Health Survey. Available at <http://publichealth.lacounty.gov/ha/hasurveyintro.htm>.

³ Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology. 2005 Los Angeles County Health Survey. Available at <http://publichealth.lacounty.gov/ha/hasurveyintro.htm>.

⁴ Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology. 2005 Los Angeles County Health Survey. Available at <http://publichealth.lacounty.gov/ha/hasurveyintro.htm>.

⁵ Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology. 2005 Los Angeles County Health Survey. Available at <http://publichealth.lacounty.gov/ha/hasurveyintro.htm>.

⁶ National Center for Health Statistics (NCHS). *National Health Interview Survey*. Hyattsville, MD: NCHS, unpublished data. Accessed at: http://www.healthypeople.gov/Document/HTML/Volume1/01Access.htm#_Toc489432813. Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.

⁷ Brown R.E., Lavarreda S.A., Peckham E., Chia Y.J. Nearly 6.4 Million Californians Lacked Health Insurance in 2007 – Recession Likely to Reverse Small Gains in Coverage. UCLA Health Policy

-
- Research Brief. December 2008. Available at http://www.healthpolicy.ucla.edu/pubs/files/CAs_Lack_Insurance_PB_121508.pdf
- ⁸ Licensed Healthcare Facilities. Downloadable Data from Network for a Healthy California – GIS Map Viewer. Source: Office of Statewide Health Planning and Development. January 1, 2008
- ⁹ Community Health Councils, Inc. Does Race Define What’s in the Shopping Cart? Community Health & Education. Policy Brief. April 2008.
- ¹⁰ Shaffer, Amanda. The Persistence of L.A.’s Grocery Gap: the need for a new food policy and approach to market development. Center for Food and Justice, Urban and Environmental Policy Institute, Occidental College. May 2002.
- ¹¹ Shaffer, Amanda. The Persistence of L.A.’s Grocery Gap: the need for a new food policy and approach to market development. Center for Food and Justice, Urban and Environmental Policy Institute, Occidental College. May 2002.
- ¹² Shaffer, Amanda. The Persistence of L.A.’s Grocery Gap: the need for a new food policy and approach to market development. Center for Food and Justice, Urban and Environmental Policy Institute, Occidental College. May 2002.
- ¹³ Shaffer, Amanda. The Persistence of L.A.’s Grocery Gap: the need for a new food policy and approach to market development. Center for Food and Justice, Urban and Environmental Policy Institute, Occidental College. May 2002.
- ¹⁴ Community Health Councils, Inc. Does Race Define What’s in the Shopping Cart? Community Health & Education. Policy Brief. April 2008.
- ¹⁵ Community Health Councils, Inc. Does Race Define What’s in the Shopping Cart? Community Health & Education. Policy Brief. April 2008.
- ¹⁶ California Food Retailers. Downloadable Data from Network for a Healthy California – GIS Map Viewer. Content Publisher: Dun & Bradstreet. 07/2008
- ¹⁷ Farmer Net. Certified Farmers’ Markets of Southern California. <http://www.farmer.net/events/cfms>
- ¹⁸ California Food Retailers. Downloadable Data from Network for a Healthy California – GIS Map Viewer. Content Publisher: Dun & Bradstreet. 07/2008
- ¹⁹ California Food Retailers. Downloadable Data from Network for a Healthy California – GIS Map Viewer. Content Publisher: Dun & Bradstreet. 07/2008
- ²⁰ Epstein AJ. The role of public clinics in preventable hospitalizations among vulnerable populations. *Health Serv Res.* 2001;36(2):405-20.
- ²¹ CDC. Health insurance coverage and receipt of preventive health services—United States, 1993. *Morbidity and Mortality Weekly Report* 44:219-225, 1995.
- ²² Weissman, J.S., and Epstein, A.M. The insurance gap: Does it make a difference? *Annual Review of Public Health* 14:243-270, 1993.
- ²³ U.S. General Accounting Office (GAO). *Health Insurance: Coverage Leads to Increased Health Care Access for Children*. GAO/HEHS-98-14. Washington, DC: GAO, 1998.
- ²⁴ Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. HP 2010 Objective 1-6. Available at: http://www.healthypeople.gov/Document/HTML/Volume1/01Access.htm#_Toc489432813
- ²⁵ Reinhardt, U.E. Coverage and access in health care reform. *New England Journal of Medicine* 330:1452-1453, 1994
- ²⁶ Hafner-Eaton, C. Physician utilization disparities between the uninsured and insured: Comparisons of the chronically ill, acutely ill, and well non-elderly populations. *Journal of the American Medical Association* 269:787-792, 1993.
- ²⁷ Epstein AJ. The role of public clinics in preventable hospitalizations among vulnerable populations. *Health Serv Res.* 2001;36(2):405-20.

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- ²⁸ Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. HP 2010 Objective 1-6. Available at: http://www.healthypeople.gov/Document/HTML/Volume1/01Access.htm#_Toc489432813.
- ²⁹ Weinick, R.M.; Zuvekas, S.H.; and Drilea, S.K. *Access to Health Care—Sources and Barriers, 1996*. MEPS Research Findings No. 3. AHCPR Pub. No. 98-0001. Rockville, MD: Agency for Health Care Policy and Research (AHCPR), 1997.
- ³⁰ Moy, E.; Bartman, B.A.; and Weir, M.R. Access to hypertensive care: Effects of income, insurance, and source of care. *Archives of Internal Medicine* 155(14):1497-1502, 1995.
- ³¹ Ettner, S.L. The timing of preventive services for women and children: The effect of having a usual source of care. *American Journal of Public Health* 86:1748-1754, 1996.
- ³² USDHHS. 2001. Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. US Dept of Health and Human Services. Available at www.surgeongeneral.gov/topics/obesity/calltoaction/CaltoAction.pdf.
- ³³ Carlson SJ, Andres MS, Bickel GW. 1999. Measuring food insecurity and hunger in the United States: development of a national benchmark and prevalence estimates. *J Nutr* 129:510S-6S.
- ³⁴ DC Sloan, AL Diamant, LB Lewis, AK Yancey, G Flynn, et. al. Improving the nutritional resource environment for healthy living through community based research. *Journal of General Internal Medicine*, 2003
- ³⁵ DC Sloan, AL Diamant, LB Lewis, AK Yancey, G Flynn, et. al. Improving the nutritional resource environment for healthy living through community based research. *Journal of General Internal Medicine*, 2003
- ³⁶ The Healthy Development Measurement Tool. Indicator PI.6.a Proportion of population within 1/2 mile from retail food market (supermarket, grocery store, and produce store). Accessible at: http://www.thehdm.org/indicator.php?element_id=4&objective_id=62&indicator_id=116
- ³⁷ The Healthy Development Measurement Tool. Indicator PI.6.a Proportion of population within 1/2 mile from retail food market (supermarket, grocery store, and produce store). Accessible at: http://www.thehdm.org/indicator.php?element_id=4&objective_id=62&indicator_id=116
- ³⁸ The Healthy Development Measurement Tool. Indicator PI.6.a Proportion of population within 1/2 mile from retail food market (supermarket, grocery store, and produce store). Accessible at: http://www.thehdm.org/indicator.php?element_id=4&objective_id=62&indicator_id=116
- ³⁹ Gruenewald PJ, Remer L. 2006. Changes in outlet densities affect violence rates. *Alcohol Clin Exp Research* 30(7):1184-1193.
- ⁴⁰ 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.
- ⁴¹ 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.
- ⁴² USDA (US Dept of Agriculture). 2002. US Food Marketing System, Agriculture Marketing Report No. 811. Economic Research Service.
- ⁴³ Basiotis PP. 1992. Validity of the self-reported food sufficiency status item in the US. In Haldeman, Va, ed. Paper presented at American Council on Consumer Interests. 38th Annual Conference. US Dept. of Agriculture,. Columbia, MD. Drewnoski A, Darmon N, Briend A. 2004. Replacing fats and sweets with vegetabes and fruit – a question of cost. *American Journal of Public Health* 94(9):1555-9.
- ⁴⁴ Drewnoski A, Darmon N, Briend A. 2004. Replacing fats and sweets with vegetables and fruits – a question of cost. *American Journal of Public Health* 94(9):1555-9.
- ⁴⁵ US Green Building Council. LEED rating systems, neighborhood development. <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148>
- ⁴⁶ Moore Iacofano Gostsman, Inc. Richmond general plan update, issues & opportunities, paper #8: community health and wellness (draft). 2007. <http://www.cityofrichmondgeneralplan.org/docManager/1000000640/Existing%20Condictions%2>

0Report%20August%202007.pdf

⁴⁷ Schweitzer JH, Kim JW, Mackin JR. 1999. The impact of the built environment on crime and fear of crime in urban neighborhoods. *Journal of Urban Technology* 6(3):59-74.

⁴⁸ Ingami S, Cohen DA, Finch BK, Asch SM. 2006. You are where you shop: Grocery store locations, weight, and neighborhoods. *Amer Journal of Prev Med* 31(1):10-17.

⁴⁹ Community Health Councils, Inc. Does Race Define What's in the Shopping Cart? Community Health & Education. Policy Brief. April 2008.

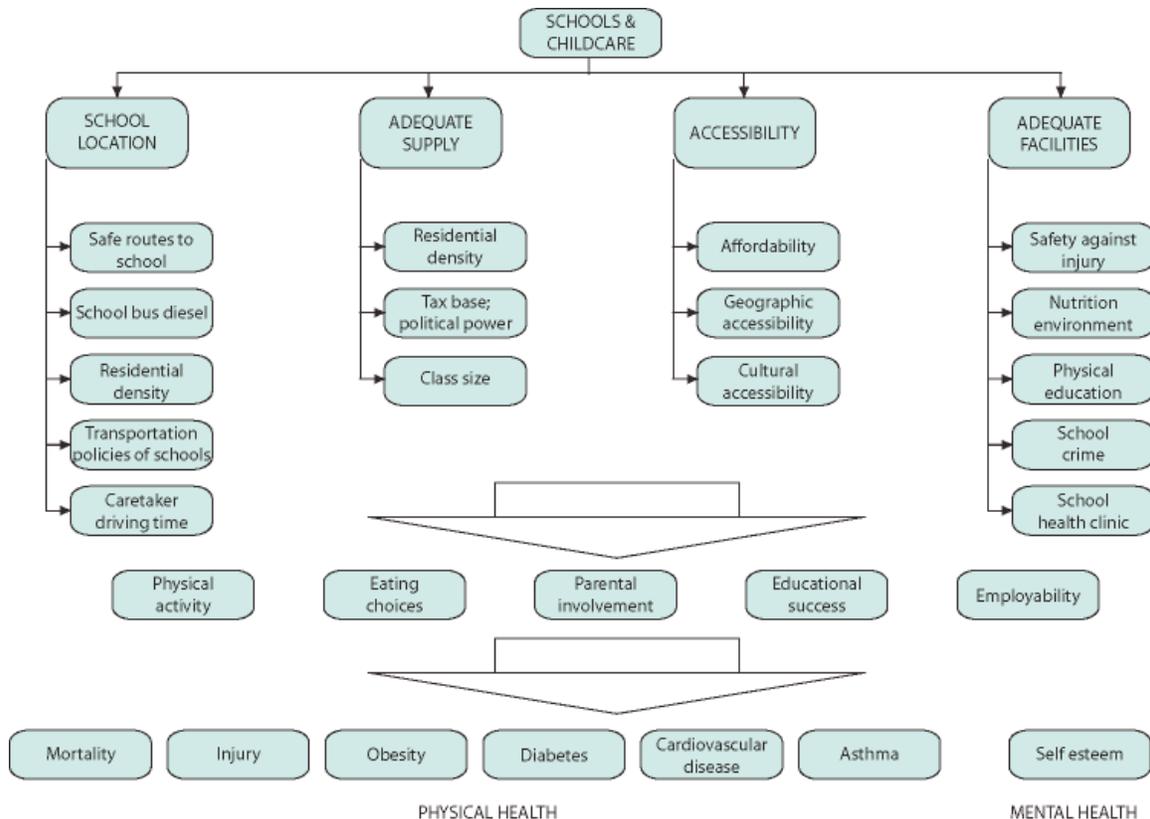
⁵⁰ San Francisco Department of Public Health, 2006. Healthy Development Measurement Tool. Objective PI.6 Assure access to daily goods and service needs, including financial services and healthy foods. Available at http://www.thehdm.org/objective.php?element_id=4&objective_id=62

⁵¹ Community Health Councils, Inc. Does Race Define What's in the Shopping Cart? Community Health & Education. Policy Brief. April 2008.

29th St. / San Pedro St. Area Health Impact Assessment
Chapter 4: Education

Health Pathways

Education is among the most important social determinants of health. Health effects of education may be mediated through income, or education may affect health independently. As illustrated in the diagram below, quality education in school, supportive educational services provided by afterschool programs, and the physical location of a school can affect children’s academic performance and opportunities for educational development, ultimately influencing health outcomes.



A. Introduction

This chapter provides an assessment of the potential impacts of The Crossings development project on educational opportunities for school-age children in the project area. This section focuses on K-12 education and afterschool programs in particular. The following questions relating to health and education were explored in this Health Impact Assessment:

- *Do existing schools meet the perceived needs of the local community?*
- *Do existing afterschool programs meet the perceived needs of the local community?*
- *What types of needed educational facilities and programming are not currently available within the community?*
- *How can the proposed project provide additional educational facilities and programming that meet community needs?*

B. Existing Conditions

Early Childhood & K-12 Education

According to the 2000 Census, 2,821 children under the age of 5, and 6,125 children age 5-17 lived within 0.5 mile of The Crossings development. Three Los Angeles Unified School District (LAUSD) schools—two elementary schools that provide K-5 educational services and an early education center—are located within a half-mile radius of The Crossings. Located somewhat farther, between one-half- and one-mile away, are nine more LAUSD elementary schools, two early education centers, two kindergartens, one middle school, and two high schools. In addition, two more elementary schools and a middle school are under construction in close proximity to The Crossings.

Table 1 presents a list of schools in The Crossings development area, the grade levels that they serve, their enrollment, the ratios of students per teacher, the proportion of students rated as being proficient in English and math, and academic performance indices.

Table 4-1: Schools within 1 Mile of The Crossings development

School	Grade Levels	Distance from The Crossings (miles)	Enrollment (2007)	Students per Teacher (2007)	English Language Proficiency (% , 2006)	Math proficiency (% , 2006)	Academic Performance Index (2007)
28 th Elementary School	K-5	0	1,605	19.1	21.8	37.5	664
Harmony Elementary School	K-5	0.3	948	19.8	24.6	35.9	662
Roberti Early Education Center	P	0.3	I.U.	N.A.	N.A.	N.A.	N.A.
Center for Advanced Learning	K-5	0.7	180	N.A.	N.A.	N.A.	N.A.
20 th St. Elementary School	K-5	0.9	839	19.5	26.8	41.8	687
Hooper Early Education Center	P	0.8	I.U.	I.U.	N.A.	N.A.	N.A.
Hooper Elementary School	K-5	0.8	1,515	19.9	16.0	32.6	620
Hooper Primary Center	K	0.9	295	18.4	N.A.	N.A.	N.A.
Jefferson New Elementary School	K-5	0.9	583	18.8	20.3	38.7	656
Jefferson Continuation High School	9-12	0.9	122	19.7	45.0	17.0	544
Thomas Jefferson Senior High School	9-12	0.9	2,997	22.3	40.0	38.7	457
Synergy Charter Academy	K-5	0.9	139	19.9	57.2	82.2	846
Wadsworth Early Education Center	P	0.7	I.U.	I.U.	N.A.	N.A.	N.A.
Wadsworth Elementary School	K-5	0.7	1,223	20.1	18.2	31.7	642
John Adams Middle School	6-8	0.8	1,477	21.1	21.0	22.0	625
San Pedro Elementary School	K-5	0.9	748	16.6	37.0	50.0	738
Trinity Elementary School	K-5	0.9	780	17.7	20.0	37.0	663
Lizarraga Elementary School	K-5	0.9	704	17.2	20.0	39.0	656
Maple Primary Center	K-1	0.9	186	12.4	N.A.	N.A.	N.A.

N.A.=Not applicable

I.U.=Information unavailable

In all of the schools listed in Table 1, with the exception of Synergy Charter Academy, the proportion of students demonstrating adequate English language and math proficiency ranges from 16% to 50%, which indicates poor academic performance. Academic Performance Indices (APIs), used uniquely in California, measure student academic performance reported on a numeric index from 200 to 1,000. In 2007, all of the elementary schools listed above had API scores lower than the LAUSD average of 746 and the state average of 772. Likewise, with the exception of Synergy Charter Academy, students at the area's middle and high schools also exhibited poor academic performance, with APIs ranging from 457 to 625—lower than the middle school average in LAUSD of 647 and the state average of 733, and the high school average in LAUSD of 625 and the state average of 694. All of these scores are far below the California State Board of Education's 2014 goal for schools to reach API scores of 800.

The two elementary schools (enrolling 2,553 children) within a half mile of the Crossings site, do not have the capacity to serve all or most of the area's school-aged children. However, the two additional elementary schools and middle school that are currently under construction in this area may likely alleviate this shortage. In addition, given over a dozen schools located between 0.5 and 1 mile of the Crossings site, a shortage of schools is not likely to be the main problem affecting the area's children. Although data were unavailable on the average class sizes of the area's schools, student-teacher ratios for the K-12 schools within a 1-mile radius of the Crossings area mostly do not exceed twenty—the upper limit of class size associated with quality education—suggesting that the class size may not be a major issue in these schools.

Afterschool programs

Table 2 provides a list of afterschool programs near The Crossings.

There is no afterschool program within 0.5 miles of The Crossings development area. Only two afterschool programs were identified within one mile of the 28th Elementary School, which is adjacent to The Crossings: *El Santo Niño*, a program of Catholic Charities, is a non-profit organization; and *Villa Esperanza* is operated by the Esperanza Housing Corporation.

El Santo Niño provides childcare and school readiness services for children aged 3-5 and an afterschool program for youth and adolescents aged 8-17. It has the capacity to serve 20-60 students, with licensed staff to serve up to 40.

Villa Esperanza provides K-5 tutoring services and ESL classes. According to a community resident, *Villa Esperanza's* afterschool program is popular among area residents in part because it is accessible to them, and because it provides services that are needed and valued by the community. Due to limited resources *Villa Esperanza* does not have the capacity to increase the number of students that it currently serves, and the program uses strict eligibility requirements to screen for admission.

There are three more afterschool programs within 4 miles of The Crossings project area: *A Place Called Home*; *L.A. Bridges Program*; and the *Ketchum-Downtown YMCA*.

A Place Called Home offers comprehensive after-school program for students age 8 to 20, including tutoring, literacy, homework assistance, academic support services for at-risk youth, and a drop-out recovery program through LAUSD. *A Place Called Home* has a capacity to serve 250-300 students during the school year and 600-650 in the summer. Funded by the *L.A. City Community Development*

Department in collaboration with *All People's Christian Center*, the afterschool program at *L.A. Bridges Program* is offered to adolescents ages 14 to 21. In addition, cultural and recreational services are also provided at *L.A. Bridge*. The *Ketchum-Downtown YMCA* provides childcare, recreational programs including health and fitness, and youth services. Due to their distances from The Crossings, these three afterschool programs are less accessible to project-area residents who are without means of reliable transportation.

Table 4-2: Afterschool Programs near The Crossings development

Program	Services Offered	Distance	Comments
<p><i>El Santo Niño</i></p> <p>Program of Catholic Charities; Supported by donations, fees, grants, independent fund raising and United Way</p>	<ul style="list-style-type: none"> • Childcare • After school program • School readiness • Employment services • Adult Education • Personal recreational programs and youth services for residents of South Central Los Angeles 	0.6 miles	<ul style="list-style-type: none"> - After school for youth & adolescents aged 8-17; -School readiness for youth age 3-5 -Serves 20-60 students on school days - Licensed staff of 40 -No geographic restrictions
<p><i>Villa Esperanza</i></p> <p>Program of Esperanza Housing Corporation</p>	<ul style="list-style-type: none"> • K-5 Tutoring • ESL • Computer classes for adults 	0.6 miles	<ul style="list-style-type: none"> -Not enough resources to provide additional services
<p><i>A Place Called Home</i></p> <p>Program for at risk youth in Los Angeles</p>	<ul style="list-style-type: none"> • Youth services • Tutoring • Homework assistance • Academic report services • Computer classes • ESL • Health, Nutrition & Wellbeing • Community Volunteer & Initiatives • Recreation/Athletics 	1.6 miles	<ul style="list-style-type: none"> - No geographic restrictions - Serves youth ages 8-20 - Capacity: 250-300 during school year; 600-650 in summer
<p><i>L.A. Bridges Program</i></p> <p>Funded by L.A. City Community Development Department in cooperation with All People's Christian Center</p>	<ul style="list-style-type: none"> • Education Services • After School Program • Cultural & Recreational services • Job counseling 	2.7 miles	<ul style="list-style-type: none"> -Serves adolescents ages 14-21 - Provided throughout youth centers in Los Angeles
<p><i>Ketchum-Downtown YMCA</i></p> <p>Private non-profit organization supported by fees, donations and private</p>	<ul style="list-style-type: none"> • Childcare • Youth services 	3.7 miles	<ul style="list-style-type: none"> -Perceived to be unaffordable by residents

funding			
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Public Libraries

There is no public library within walking distance of The Crossings. The closest library is the Junipero Sierra Branch of Los Angeles Public Library (LAPL), which is 1.5 miles from the project site, and accessible by bus 701. The Vernon Branch Library, located 1.7 miles from The Crossings, is also accessible by public transit, as is the Vermont Square Branch, located 3.0 miles away.

The Los Angeles Public Library System operates 69 branches throughout the metropolitan area. All branch libraries of LAPL provide free access to computer workstations that are connected to the library's information network as well as the internet, allow word processing and provide access to language learning and literacy services. Specially designed web sites are provided at the branch libraries for children, teens and Spanish speakers. There is a 30- minute time limit for using Kids' Path computers that provide age-appropriate learning resources and activities for children, a 15-minute limit for internet computers, and one-hour limit for internet and Word processing computers. There is no time limit for catalog and database access computers. All LAPL branch libraries are open from 10:00 a.m. to 8 p.m. Monday through Friday and from 10:00 a.m. to 8 p.m. on Saturday.

C. Analysis

In this section we assess the potential impacts of the proposed plan for The Crossings development on educational services for early-age and school-age children in the project area.

Educational Quality

Opportunities for quality education are unequally distributed in American society for both early childhood and K-12 education.¹ It has been well established that higher educational attainment is associated with higher income, and that income is one of the strongest and most consistent predictors of health. In 2006 the median earnings of adults with bachelor's degrees were 62% higher than adults with high school degrees only.² The median earnings of adult, year-round workers with professional degrees are about four times higher than those of adults who have not completed high school.³ Earning self-sufficiency income predicts better health, improved nutrition, and lower mortality.⁴ Educational attainment may also affect health independently of income. The more years of education a person completes is associated with better nutrition, lower rates of risk-taking behaviors and chronic illnesses, and lower mortality. College graduates are more likely to practice healthy behaviors such as consuming more servings of fruits and vegetables.⁵ Smoking prevalence is more than three times higher among those with only 11 years of education, compared to college graduates.⁶ Less education is a stronger predictor of partaking in cardiovascular risk factor activities (for example smoking, poor nutrition, sedentary behavior, etc.) than income or occupation.⁷ The risk associated with major depressive disorder was found to be elevated among those with 12 or fewer years of education compared with those with at least some education beyond high school.⁸

Research has found that smaller class size supports educational success. Compared with their peers from larger classes, students in small classes are more likely to be ahead of students from larger classes⁹ and less likely to be held back a year or be suspended.¹⁰

Community Perspectives on Educational Quality

The results of the survey of community residents in The Crossings area indicate that the community is aware of the need for more schools and higher-quality educational instruction. Almost half (45.5%) of survey respondents indicated that K-12 education was among the top three unmet community needs. Over one-third (38.4%) of survey respondents indicated that schools were among the three things they would most like to see in their community. Regarding specific challenges their children experience in school, over half (52%) of survey respondents cited over-crowded classroom, 45.1% indicated the subject of math, 37.1% said reading, 25.7% social interaction, and 13.7% referred to the lack of school materials/supplies.

Local residents who responded to the community survey expressed hope that The Crossings development would: help to build more schools, especially those that are “closer” to their homes or “nicer”; reduce class sizes that would allow teachers to “pay more attention to kids”; “improve school curriculum” to keep students “motivated and active in class” and help them “advance in school”; and “provide more student counseling” that would help students to “graduate and pursue more advanced education.”

Educational Quality: Conclusions

More concerning than the perceived concerns about overcrowding in local schools is across the board poor academic performance, as recognized by residents in the community survey, as well as school performance data and below average API scores. Poor academic performance is a problem plaguing many of America’s inner city schools, and may not be able to be effectively addressed by a housing development project. A significant school reform may be needed to help the area’s schools meet the standards set by *California Public Schools Accountability Act*,¹¹ which requires that public schools should improve their performance each year by 5 percentage points on the API.

Still, a well-designed housing development project such as The Crossings may provide opportunities help improve students’ academic performance by offering amenities such as afterschool programs that can provide classes such as ESL, tutoring and homework assistance to underperforming students. Given that many of the area’s students have limited English proficiency, ESL classes in particular, if provided for school-aged children, could help to support students in their adjustment to school life, and improve their capability for improved academic performance.

School Location

Research findings indicate that the physical location of schools—in particular, the distance that students travel to school—may significantly impact health outcomes. With long distances to schools being a primary barrier to walking to school,¹² the distance to school has the strongest influence on the students’ decisions to walk or bike.¹³ Living within a half-mile of school greatly increases the likelihood of walking or biking to school across all racial groups.¹⁴ Active commuting to school can provide a substantial portion of children’s physical activity,¹⁵ and children who walk or bicycle to school have higher daily levels of physical activity and better cardiovascular fitness than children who do not actively commute to school.¹⁶ Active commuting has also been associated with increased levels of independence in children¹⁷ and with increased social interaction and communication.¹⁸

Distance to school also affects pedestrian safety for children (see chapter on Pedestrian Safety, Neighborhood Walkability, and Transportation). Child pedestrian injury is a significant cause of mortality and morbidity and remains one of the leading causes of death in developed countries.¹⁹ A

child's risk for pedestrian injury is likely related to his/her overall exposure to traffic, as a longer distance to school is likely to increase such exposure and thus place children at higher risk for pedestrian-traffic collision. At least one study found that many of the collisions with motor vehicles that children experience occur when they play outdoors or while walking to places other than school.²⁰ Other research findings, however, suggest that children who walk to or from school are at a higher risk of traffic injuries, and that the higher average number of streets children cross is significantly and positively associated with traffic injury rate.²¹ It has also been well-established that children from disadvantaged areas are much more likely to experience pedestrian fatalities than their peers in higher-income communities.²²

What also matters with regard to school location is the level of violence in the surrounding area. Where gang and other types of violence persist, it is difficult for students to travel to and from school safely, which may discourage them from walking or bicycling to school regardless of the distance or the walkability of the neighborhood.²³ In addition, exposure to violence may have an adverse impact on victims' scholastic achievement, desire to attend school, and psychological health.²⁴

School Location: Conclusions

*California Code of Regulations, Title 5, §14010 for Standards for School Site Selection*²⁵ requires that the school site "shall be located within the proposed attendance area to encourage student walking and avoid extensive bussing unless bussing is used to promote ethnic diversity." With the 28th Street and other elementary schools already in operation, and the new elementary and middle schools currently under construction, schools in the vicinity of The Crossings development will likely meet this requirement. However, as there is no high school within a half-mile radius of the development, the area falls short of established standards.

A fundamental problem that may affect the ability to commute and physical activity of students living in and around The Crossings is the violence that plagues the area. Although specific data for The Crossings area is unavailable, low-income areas in Los Angeles are known for high levels of violence and crimes. A study commissioned by the Los Angeles City Council has reported that almost 75% of youth gang homicides in California during 2006 occurred in Los Angeles County, and the constant presence of the city's estimated 700 street gangs and nearly 40,000 gang members makes it difficult for school age students to travel to and from school safely.²⁶ According to a 2003 survey, the plague of gang violence in Los Angeles was so sinister that many students could not even get to and from school without witnessing a crime or being subjected to violence.²⁷

Consistent with these findings, over 70% of respondents to the community survey reported feeling unsafe in their neighborhoods. Virtually all respondents cited gang violence, vandalism, burglary and other criminal activities as reasons for feeling unsafe. Many professed staying indoors because they were afraid of going outside, and were unsure if they could "make it back home" safely. Under these circumstances, finding ways to ensure that students are able to travel to and from school safely is a high priority.

The California Education Code Section 32282(G) mandates that a school's comprehensive School Safety Plan include "procedures for safe ingress and egress of pupils, parents, and school employees to and from school."²⁸ To meet this requirement, we recommend that UHC and LA ACORN develop and implement an initiative to help ensure safe passage of students to and from school. Safe

Passage Partnership (SPP), a multi-agency effort (involving schools, the school district, local law enforcement, school police, probation, transportation agency, gang violence intervention programs and other entities) to protect students from gang violence as they travel to and from school, has been implemented at high schools in Los Angeles since 2003.²⁹ Proven successful, this model has been adopted as an essential component in several recent school safety initiatives launched by the City and County of Los Angeles and the Los Angeles Unified School District. ACORN and UHC could work with these entities and other community organizations to develop and implement a similar initiative in The Crossings area. Such concerted effort would also be needed to prevent common areas of the Crossings development from being plagued by gang activities.

Early Childhood Education

Early childhood development interventions are effective in preventing developmental delay by improving grade retention and establishing placement in special education for those who need it.³⁰ Children who attended early childhood programs are significantly more likely to meet their school's basic requirements, perform well in school and on intelligence tests, and to give achievement-related reasons (such as school or work) for being proud of themselves.³¹ Research shows that young adults who have had consistent child care as children score higher on tests of academic skills, are more likely to still be in school at age 21, and attend a four year college.³²

Early Childhood Education: Conclusions

The number of children under the age of 5 living in close proximity to The Crossings exceeds the capacity of the existing early education centers in the area. Two early education centers and a kindergarten are located between half- and one-mile radiuses from the Crossings site, however, given safety concerns in the area, it is important to have early childhood centers in close proximity to where children and their families reside in order to reduce the distance traveled to these locations.

Although childcare is among the programs included in the proposed plan for The Crossings, an early education center is not. The scarcity of early education centers in the project area is evident. The construction of 450 units of housing under the proposed plan is likely to increase the number of children who will need early education services, and thus exacerbate the existing need.

A new childcare center could have the capacity to offer programs for early education. Without specific details about programming and facilities for childcare included in the plan, it is difficult to assess if or how it will impact early-age education for children living in or around The Crossings.

The proposed plan for The Crossings development includes in phase 1 building a 2,500 square foot community room, with a computer lab, kitchen, and with an adjacent playground. Though modest in size, the combination of communal indoor and outdoor areas available for the planned community room would make the space an appropriate site for a new early education center. That space could also be used for other community events outside the hours needed by the new the early education center.

Afterschool Programs

Research has found that participation in afterschool programs, especially those consisting of voluntary structured activities, is linked to positive academic and social developmental outcomes for school-aged children.³³ Conversely, time spent unsupervised is associated with negative outcomes including academic³⁴ and emotional difficulties,³⁵ delinquency,³⁶ and drug use. Studies have

demonstrated that participation in afterschool programs can increase school attendance³⁷, enhance academic performance and educational aspirations.³⁸ Research shows that school children who participate in afterschool programs report feeling safer during after-school hours.³⁹ The study also showed that low-income urban children who attended after-school programs spent more time on academic and extracurricular activities than children in informal care settings,⁴⁰ and the time that children spent in these activities was correlated with their academic and conduct grades, peer relations, and emotional adjustment.⁴¹ It has also been reported that students who have participated in an after-school fitness and nutrition program show improved health outcomes (e.g. improvements in systolic blood pressure) and healthier diets.⁴²

Community Perspectives on Afterschool Programs

The need for afterschool programs ranked among the highest educational concerns expressed by community residents living in The Crossings area. Survey respondents indicated that they needed local afterschool programs that would provide tutoring to help children with their homework, help improve academic performance, and offer career advice and “programs to promote positive activities.” They also believe that afterschool programs would “keep children off the streets,” “give them a safe place to play and to do homework,” and “keep their minds occupied so that they would stay away from gang activities.”

Cost is a barrier to afterschool programming that a number of survey respondents made reference to. In particular, project area residents described existing afterschool programs at the Ketchum YMCA Downtown as being unaffordable. Additionally, as related by some residents, stringent eligibility criteria used at *Villa Esperanza* also pose a barrier that has left many of the 29th Street project area’s residents ineligible for the program.

After School Programs: Conclusions

With only two limited capacity afterschool programs located within one mile of The Crossings location, and academic performance indices indicating a need for academic support for local k-12 students, there is evidence of an unmet need for afterschool programming in the community living in The Crossings area. As discussed above, afterschool programs provide important benefits for school-aged children. In an area where violence is a major concern, afterschool programs can serve to shield children from street violence while keeping them engaged in academic, artistic, athletic and other developmentally appropriate activities they may not be exposed to otherwise.

Afterschool programs at The Crossings could be designed to reflect the successful elements of existing programs in similar areas, such as in Oakland, CA where *Quality Standards for Oakland After-School Programs* have been established to require that the program site to be accessible to youth by public transportation or other means, and that focuses specifically on protecting the physical safety of youth traveling to and from the program (See Appendix A).

UHC’s plan for The Crossings includes at least one afterschool program in the proposed development. Based on existing conditions and data from the community survey, we expect that community residents will find a new afterschool program at The Crossings to be valuable. At the same time, a single afterschool program may not be sufficient in meeting the existing demand for such programs in that area, especially if the number of school-aged children increases with the new housing development.

If the afterschool program at The Crossings is offered free of cost, and has eligibility criteria that will allow admission to local children most in need, it may be particularly helpful for low-income residents whose children are not eligible for other local afterschool programs, but are unable to afford fee-based programs.

Public Libraries

Public libraries have traditionally served as sources of information, and are currently evolving into a primary source of Internet access in many low-income communities. Library patrons use the Internet, among other purposes, as an educational resource to assist K-12 students with school and homework assignments, information literacy skills, technology training, and skill-building.⁴³

The “digital divide,” or the gap between those who have access to the latest information technologies and those who do not⁴⁴ is often measured by personal computer ownership and access to the Internet.⁴⁵ The digital divide has been found to have a disproportionately negative affect on lower-income minorities.⁴⁶ Research shows that school-aged children who have a more limited access to technology are less likely to perform well in school.⁴⁷

Community Perspectives on Public Libraries

Over three-quarters (76 %) of local residents who responded to the community survey indicated that libraries were one of the services that they would most like to see in their community. Indeed, libraries may be places where children, as well as adults, could safely engage in educational activities outside of their homes.

Public Libraries: Conclusions

Currently there is not a plan to build a library at The Crossings. However, the valuable educational resources provided by a library could help to improve academic performance of local school-aged children living in and around The Crossings. As books, films and videos can be borrowed at no cost, a library may be particularly useful resource for low-income individuals and families. Libraries can also provide a safe and quiet place where children and adults can do school work or read.

While regular hours of operation make the local library branches reasonably accessible, the distance of local libraries from The Crossings development, especially for school-aged youth and adolescents, are a barrier to library access. Given that almost half of the area’s households do not own automobiles and the closest public library is more than a mile from the project site, there is a need to establish a branch library in this area. A public library would link low-income children living in the area with educational and technological resources, which may in turn help to prepare them for better careers and life opportunities in the future. Adults could also benefit from the resources that a public library provides, especially if they are language appropriate. For these reasons, ACORN and UHC should consider work with LAPL and the City of Los Angeles to establish a library in the Crossings area. Until a library is built in closer proximity to closer to The Crossings, UHC should provide area residents with free shuttle service to local public libraries.

The limited number of computer workstations and the limited amount of time allowed for each patron to use computers at local libraries are an existing barrier to computer access and may still pose a barrier even with a new branch library. There are, however, plans to build a computer lab in the community room at The Crossings. Provided that a sufficient number of computers are

installed, this computer lab may help to mitigate some of the negative impacts that the digital divide/lack of access to computers has on community residents.

D. Recommendations: Health Promoting Mitigations for Education

Based on the analysis of existing conditions in and around The Crossings development (29th St./ San Pedro St. area), and the potential impacts of the proposed development plan, we recommend the following:

Early and K-12 education

- An afterschool program at The Crossings should be established and made available free of charge to the area's low-income residents who cannot afford fee-based afterschool programming for their children.
- An early education center should be established at The Crossings.

Afterschool Programs

- The eligibility criteria for the afterschool program at The Crossings should ensure that children living in the area and are in need, have access to the program.
- LA ACORN and UHC should work with community organizations in the area to establish additional afterschool programs outside of The Crossings.
- Transportation could be offered from The Crossings to off-site afterschool programs in the local vicinity.

Public Libraries

- LA ACCORN and UHC should work with Los Angeles Public Libraries and the City of Los Angeles to establish a branch library in The Crossings area.
- Until a library is built in closer proximity to The Crossings, UHC should provide area residents with free shuttle service to and from local public libraries.
- LA ACORN should work to ensure that sufficient computers are available at The Crossings' computer lab and afterschool program to meet the needs of local patrons.

E. Conclusions

As elsewhere in the world, education in the United States fundamentally shapes many of one's opportunities for achievement and long-term quality of life. Early childhood and K-12 education is of paramount significance as it prepares children for further educational attainment as well as for future opportunities that will allow them to lead stable and healthy lives.

This analysis reveals that the residents in The Crossings/ 29th St./ San Pedro St. area face many challenges with regard to their children's education. There are few schools where children can walk to safely, and student's academic performance is on average below the accepted standards for achievement. There is also an unmet need for afterschool programs in the area.

The recommendations articulated in this chapter are aimed to demonstrate how The Crossings development could help to address the needs identified by community residents and highlighted in the analysis of existing conditions data.

References

- ¹ Kozol J. 1992. *Savage Inequalities: Children in America's Schools*. New York: Harper Perennial.
- ² Bureau of Labor Statistics, as reported in the *San Francisco Chronicle*. Getting a degree pays off with higher salary. August 18, 2007. Available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/08/18/BUQ5RKS4J.DTL>.
- ³ US Census Bureau. Table B. Median earnings of full-time, year-round workers by selected characteristics: 1998. www.census.gov/hhes/income/income98/in98ern.html
- ⁴ National Academy of Sciences. 2006. *Genes, Behavior, and the Social Environment: Moving Beyond the Nature/Nurture Debate*. LM Hernandez and DG Blazer, eds. The National Academies Press. Accessed at: http://orsted.nap.edu/openbook.php?record_id=11693&page=25.
- ⁵ CDC. 2007. Fruit and vegetable consumption among adults: United States 2005. *Morbidity and Mortality Weekly Review* 56: 213-217.
- ⁶ CDC. 1996. Cigarette smoking among adults: United States, 1994. *Morbidity and Mortality Weekly Review* 45: 588-590.
- ⁷ Winkelby MA, Jatulis DE, Frank E, Fortmann SP. 1992. Socioeconomic status and health: How education, income and occupation contribute to risk factors for cardiovascular disease. *American Journal of Public Health* 82: 815-820.
- ⁸ Mezuk B, Eaton WW, Golden SH, Ding Y. 2008. The influence of educational attainment on depression and risk of type 2 diabetes. *American Journal of Public Health*. 98(8):1480-5.
- ⁹ Finn JD, Achilles CM. 1999. Tennessee's class size study: Findings, implications, misconceptions. *Educational Evaluation and Policy Analysis Special Issue – Class Size: Issues and New Findings* 21(2):165-177.
- ¹⁰ Pate-Bain H, Fulton BD, Boyd-Zaharias J. 1999. *Effects of class size reduction in the early grades (K-3) on high school performance*. Nashville: HEROS, Inc.
- ¹¹ Accessed at <http://www.cde.ca.gov/ta/ac/pa/>
- ¹² Dellinger A, Staytib C. 2002. Barriers to children walking and bicycling to school. *Morbidity and Mortality Weekly Report* 51: 701-704.
- ¹³ McDonald NC. Active transportation to school: trends among U.S. schoolchildren, 1969-2001. *American Journal of Public Health*. 2007 Jun;32(6):509-16.
- ¹⁴ McDonald NC. Critical factors for active transportation to school among low-income and minority students. Evidence from the 2001 National Household Travel Survey. *Am J Prev Med*. 2008 Apr;34(4):341-40.
- ¹⁵ C. Tudor-Locke, L.J. Neff, B.E. Ainsworth, C.L. Addy and B.M. Popkin, Omission of active commuting to school and the prevalence of children's health-related physical activity levels: the Russian longitudinal monitoring study, *Child Care Health Development* 28 (2002), pp. 507–512.
- ¹⁶ Davison KK, Werder JL, Lawson CT. Children's active commuting to school: current knowledge and future directions. *Preventing Chronic Dis*. 2008 Jul;5(3):A100.
- ¹⁷ Merom D, Tudor-Locke C, Bauman A, Rissel C. Active commuting to school among NSW primary school children: implications for public health. *Health Place*. 2006 Dec;12(4):678-87.
- ¹⁸ K.M. Leyden, Social capital and the built environment: the importance of walkable neighborhoods, *Am J Public Health* 93 (2003), pp. 1546–1551; W. Poortinga, Perceptions of the environment, physical activity, and obesity, *Soc Sci Med* 63 (2006), pp. 2835–2846.
- ¹⁹ Macpherson A, Roberts I, Pless B. 1998. Children's exposure to traffic and pedestrian injuries. *Am J Public Health* 88:1840-1845.
- ²⁰ Posner JC, Liao E, Winston FK, Cnaan A, Shaw KN, Durbin DR. Exposure to traffic among urban children injured as pedestrians. *Injury Prevention*. 2002 Sep;8(3):231-5.
- ²¹ Rao R, Hawkins M, Guyer B. *Bull N Y Academy of Medicine*. 1997 Summer;74(1):65-80. Children's exposure to traffic and risk of pedestrian injury in an urban setting; Macpherson A, Roberts I, Pless IB.

Children's exposure to traffic and pedestrian injuries. *American Journal of Public Health*. 1998 Dec;88(12):1840-3.

²² Edwards P, Roberts I, Green J, et al. Deaths from injury in children and employment status in family: analysis of trends in class specific death rates. *British Medical Journal* 2006; 333, 119; Macpherson, 1998.

²³ Kerr J, Rosenberg D, Sallis JF, Saelens BE, Frank LD, Conway TL. 2006. Active commuting to school: associations with environment and parental concerns. *Medicine & Science in Sports & Exercise* 38:787-94.

²⁴ Glew GM, Fan M, Wayne K, Rivara FP. 2008. Bullying and School Safety. *Journal of Pediatrics* 152:123-8; Rigby K. Does bullying really do harm? Available from <http://www.education.unisa.edu.au/bullying/harm.html>.

²⁵ Accessed at <http://www.cde.ca.gov/LS/fa/sf/title5regs.asp>

²⁶ Advancement Project Los Angeles. 2007. A Call to Action: A Case for a Comprehensive Solution to LA's Gang Violence Epidemic. Available at http://www.advanceproj.org/index.php?q=/c/resource/sc/up_call_to_action

²⁷ California Community Relations Service, Crime and Violence Prevention Center, California Attorney General's Office. 2007. Safe Passage Partnership - a Multi-Agency Effort to Protect Students from Gang Violence as They Travel To and From School.

Available at <http://safestate.org/index.cfm?navId=436>

²⁸ Available at <http://law.onecle.com/california/education/32282.html>.

²⁹ California Community Relations Service. 2007.

³⁰ Anderson LM, Shinn C, St. Charles J. 2002. Community interventions to promote healthy social environments: Early childhood development and family housing. A report on Recommendations of the Task Force on Community Preventive Services. *Morbidity and Mortality Weekly Review* 51:1-8.

³¹ CDC. 2002. Community interventions to promote healthy social environments: Early childhood development and family housing: A report on recommendations of the Task Force on Community Preventive Services. Centers for Disease Control. *Morbidity and Mortality Weekly Report* 51:1-8. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5101a1.htm>; Lazar I, Darlington R. 1982. The lasting effects of early education: A report from the consortium for longitudinal studies. F.D. Horowitz, Ed. *Monographs of the Society for Research and Child Development*. Serial # 195(47):#2-3.

³² Campbell FA, Pungello E. 2000. High quality child care has long-term benefits for poor children. Paper presented at the 5th Head Start National Research Conference, Washington DC. June 28-July 1, 2000.

³³ Vandell DL, Pierce KM, Dadisman K. 2005. Out-of-school settings as a developmental context for children and youth. *Advances in Child Development and Behavior*. 33:43-77.

³⁴ Woods, M. B. (1972). The unsupervised child of the working mother. *Developmental Psychology*, 6, 14-25.

³⁵ Guerney, L. F. (1991). A survey of self-supports and social supports of self-care children. *Elementary School Guidance & Counseling*, 25, 234-254.

³⁶ Richardson, J. L., Radziszewska, B., Dent, C. W., & Flay, B. R. (1993). Relationship between after-school care of adolescents and substance use, risk taking, depressed mood, and academic achievement. *Pediatrics*, 92, 32-38; Dwyer, K. M., Richardson, J. L., Danley, K. L., Hanson, W. B., Sussman, S. Y., Brannon, B., Dent, C. W., Johnson, C. A., & Flay, B. R. (1990). Characteristics of eighth-grade students who initiate self-care in elementary and junior high school. *Pediatrics*, 86, 448-454.

³⁷ Welsh, M., Russell, C., Williams, I., Reisner, E. R., & White, R. (2002). Promoting learning and school attendance through after-school programming: Student-level changes in educational performance across TASC's first three years (Draft report). Washington, DC: Policy Studies Associates, Inc.

³⁸ Seligson ME. 1999. The policy climate for school-age child care. *The future of Children* 9, 135-139.

³⁹ Brooks, P., Mojica, C., & Land, R. (1995). Final evaluation report: Longitudinal study of LA's BEST after school education and enrichment program, 1992-94. Los Angeles: University of California at Los Angeles, Center for the Study of Education.

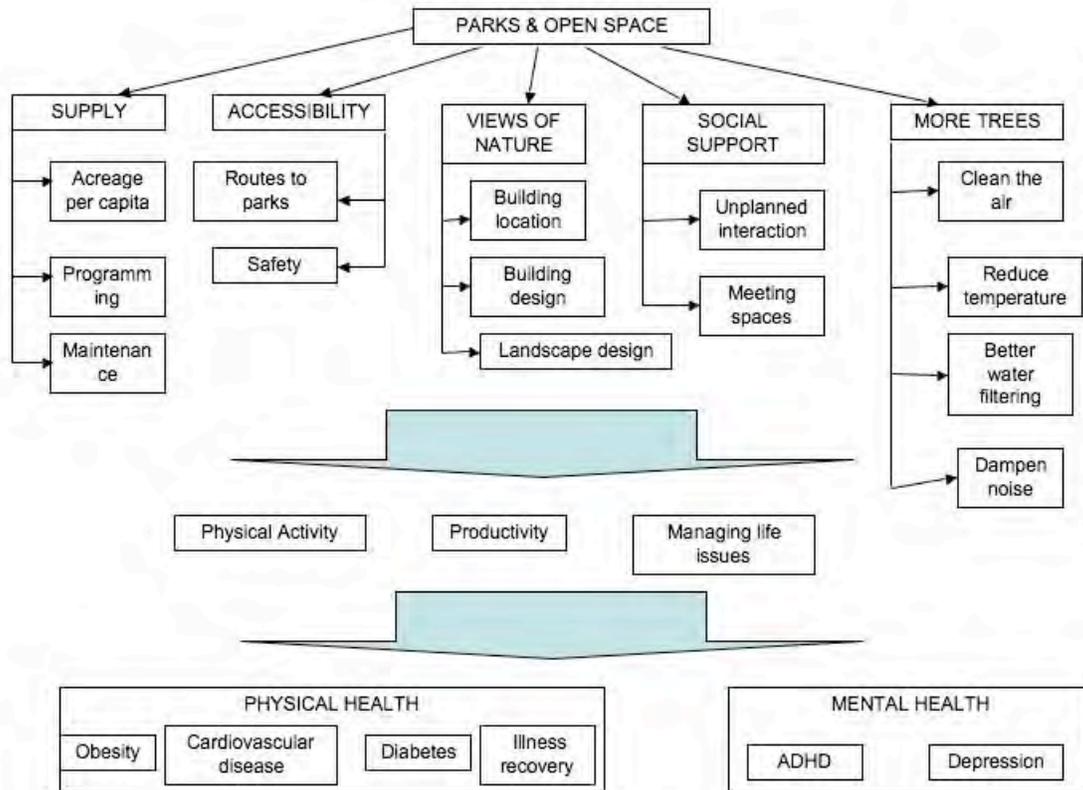
⁴⁰ Posner JK, Vandell DL. 1999. After-school activities and the development of low-income urban children: a longitudinal study. *Developmental Psychology*, 35(3):868-79.

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- ⁴¹ Posner JK, Vandell DL. 1994. Low-income children's after-school care: are there beneficial effects of after-school programs? *Child Development* 65(S2):440-56.
- ⁴² Engels HJ, Gretebeck RJ, Gretebeck KA, Jimenez L. 2005. Promoting Healthful Diets and Exercise: Efficacy of a 12-Week After-School Program in Urban African Americans. *Journal of the American Dietetic Association* 105(3): 455-459.
- ⁴³ Bertot JC, McClure CR, Jaeger PT. 2008. The Impacts of Free Public Internet Access on Public Library Patrons and Communities. *The Library Quarterly*, Volume 78 Number 3 (July 2008): 285–301.
- ⁴⁴ Compaine, B.M. (Ed.) (2001a), *The Digital Divide: Facing a Crisis or Creating a Myth?*, The MIT Press, Cambridge, MA.
- ⁴⁵ Kastsinas, S.G. and Moeck, P. (2002), “The digital divide and rural community colleges: problems and prospects”, *Community College Journal of Research and Practice*, Vol. 26, pp. 207-24.
- ⁴⁶ M Brodie, R E Flournoy, D E Altman, R J Blendon, J M Benson, and M D Rosenbaum. 2000. Health information, the Internet, and the digital divide. *Health Affairs*, 19(6), 255-265.
- ⁴⁷ Huang, J, Russell, S. 2006. The digital divide and academic achievement. *Electronic Library*, 24(2): 160-173.

29th St. / San Pedro St. Area Health Impact Assessment Chapter 5: Parks and Recreation Facilities

Health Pathways

The analysis of parks and recreation facilities considered the effects of The Crossings at 29th Street Development (“The Crossings”) on the availability, accessibility and potential use of parks and recreation facilities for communities in the 29th St./ San Pedro St. area. The following pathway diagram depicts connections between parks, open space and health.



A. Introduction

The presence of parks and recreation facilities in a community has been associated with a range of health and social benefits. In addition to increasing social cohesion and contributing to the improvement of environmental quality, perhaps the most well-known health benefit of having access to parks and recreation facilities is the opportunity that it provides for physical activity. It is well established that physical activity plays a vital role in maintaining health and preventing disease, in improving mental health, and in increasing lifespan. Still, over half of adults and over one third of high school students do not get as much exercise as the Surgeon General recommends. While individuals must take some responsibility for their own health-related behaviors, there are important environmental factors, such as a lack of sufficiently safe and accessible parks and recreational opportunities, which impact an individual’s ability to be physically active. Due to the fact that parks and open space have such clear, positive benefits to those in close proximity,

developments such as The Crossings should prioritize supporting the maintenance and establishment of safe and accessible parks and recreational facilities.

This chapter provides an assessment of several health effects, mediated through parks and recreation facilities, which are relevant to The Crossings. Community need for parks and recreation facilities, and the barriers preventing access to existing parks and recreation facilities are explored in this section, and the proposed development plan is analyzed for their ability to fill gaps. This chapter explores the following questions:

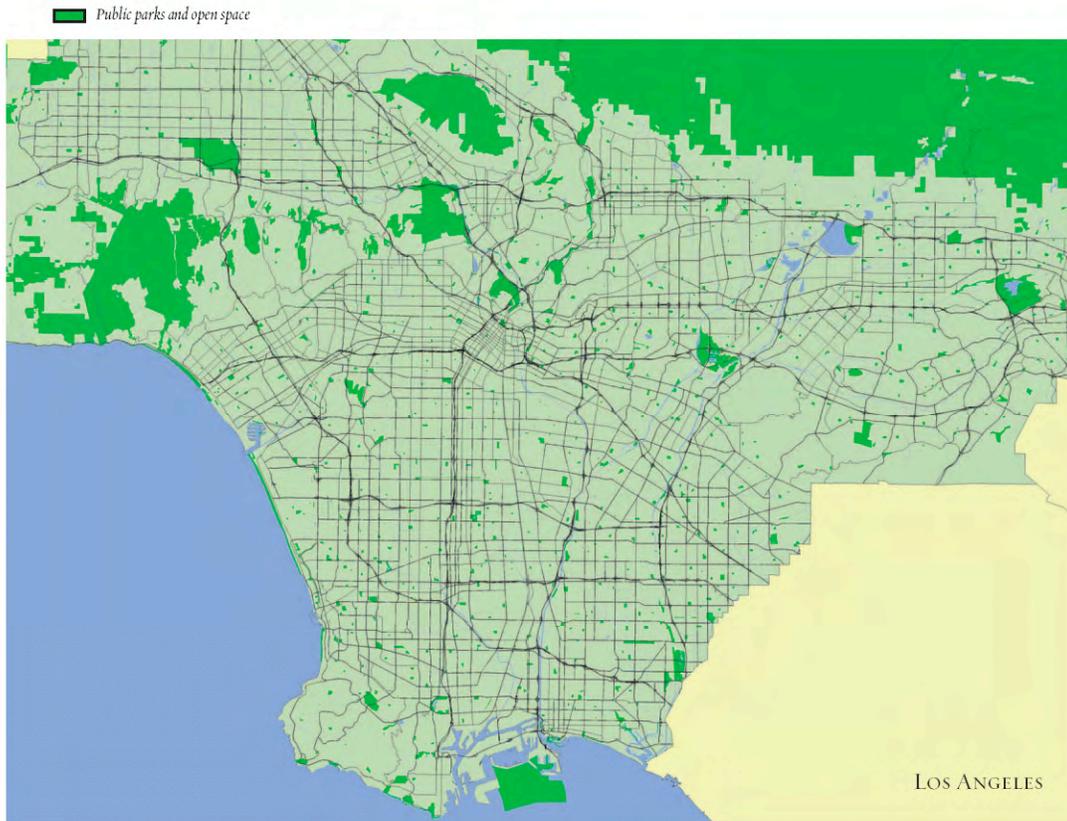
- *What is the need for parks and recreation facilities in the area around The Crossings development?*
- *How will development of The Crossings address these needs?*

B. Existing Conditions

Residents of South Los Angeles are underserved by existing park space.¹ Out of 13 square miles of South Los Angeles, only 4.72 square miles fall within walking distance of park space.² According to the 2005 Los Angeles County Health Survey, 25% of parents of children ages 0-17 in the 90011 zip code (where The Crossings is located) reported that a safe park or playground is *not* accessible to them, compared to 16.9% in LA County.³ In a study of seven major metropolitan areas, Los Angeles ranked lowest for park accessibility, with only one-third of children living within walking distance of a public park or other open space.⁴ This means that over 650,000 children lack easy park access in the city of Los Angeles.⁵

Figure 5-1: Parks and open space in Los Angeles

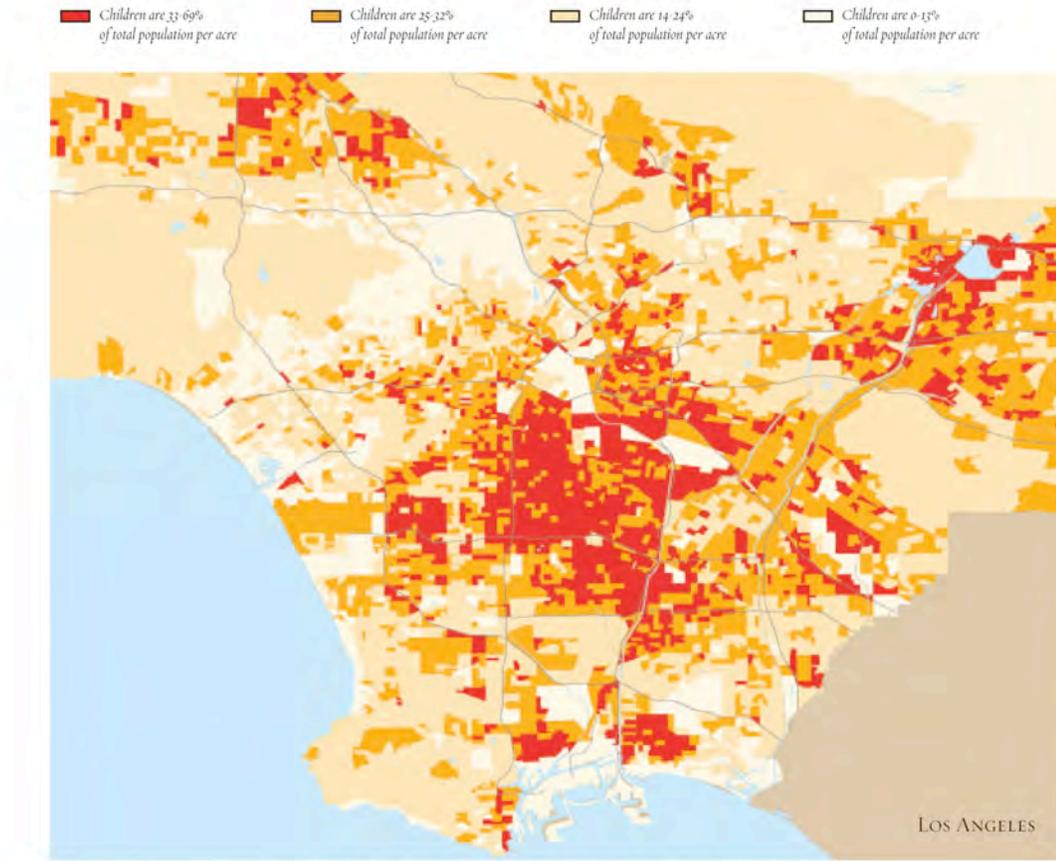
- less park space is located in central and southeastern areas of the city



Source: Trust for Public Land, “No Place to Play”, 2004

Figure 5-2: Concentration of children living in Los Angeles

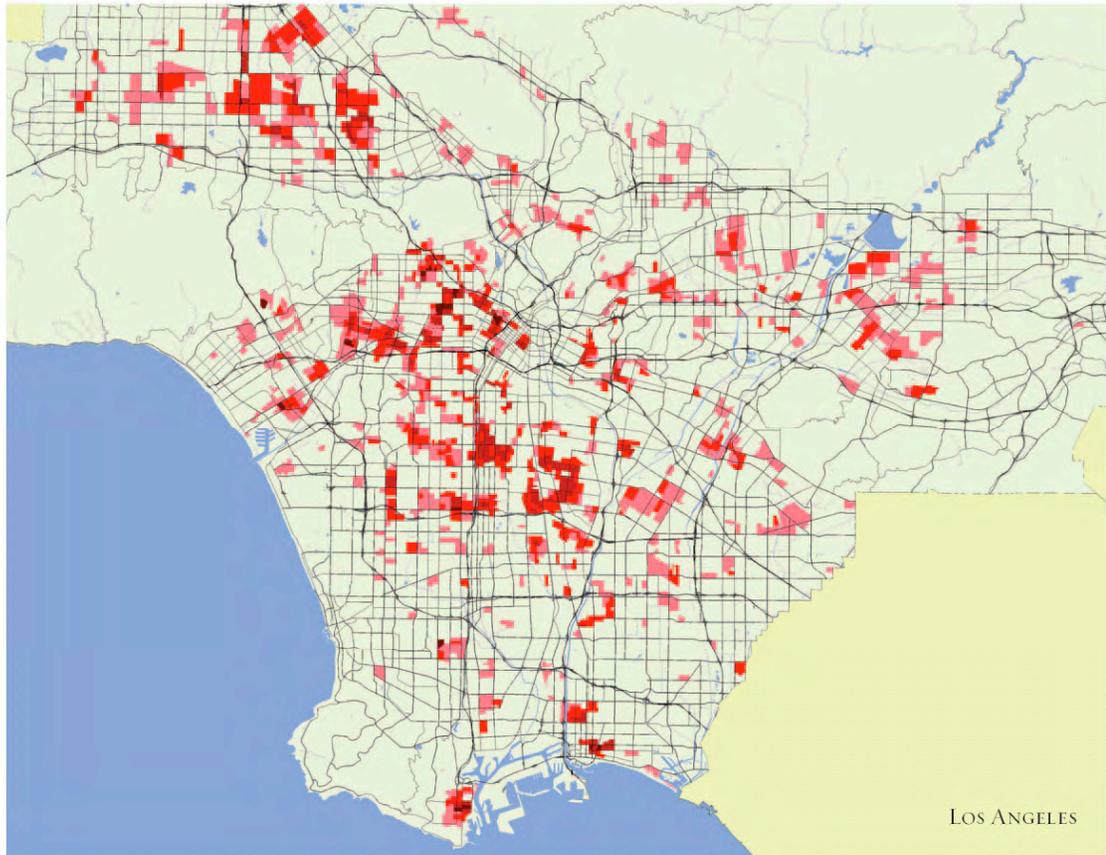
- many areas where high concentrations of children reside are park poor



Areas shaded red indicate high children's population density zones.

Source: Trust for Public Land, "No Place to Play", 2004

Figure 5-3: Areas of Los Angeles with the poorest access to parks



Source: Trust for Public Land, “No Place to Play”, 2004

In the U.S., only an estimated 25% of adults engage in the recommended levels of physical activity, just 29% engage in leisure time physical activity, and only 27% of students in grades 9 through 12 engage in moderate-to-intensive physical activity.⁶ In the Southeast Los Angeles Health District, less than half (48.1%) of adults meet guidelines for physical activity.⁷

Lack of safe and accessible parks and open spaces in South Los Angeles encourages residents to rely on other types of public spaces, such as swap meets, to meet their social needs.⁸ However, these spaces are often known for hosting illegal activities that can pose a threat to safety, especially for children and families.

Despite the limited park space in South Los Angeles, existing parks remain an important public space for local residents.⁹ Research from the University of California Los Angeles has shown that parks are important spaces where Latinos often socialize, and that African-American communities typically rely on for recreational purposes such as team sports.¹⁰ This is particularly important for South Los Angeles, where 73% of the population is Latino and nearly 25% is African American.^{11 12}

Table 1 shows parks and recreation centers located within 3 miles of The Crossings:

Table 5-1: Parks and Recreation Centers near The Crossings development

Park	Park Type & Size	Distance from Project Site
Trinity Park and Recreation Center		0.52 miles
Central Recreation Center/ Central Playground	0.64 acres	0.8 miles
Central Ave Jazz Park	pocket park, 7,250 square feet	1.0 mile
Gilbert Lindsey Park & Rec. Center	community park, 14.5 acres	1.23 miles
St. James Park	pocket park	1.54 miles
Ross Snyder Playground and Rec. Center	neighborhood park, 9 acres	1.57 miles
Hoover Recreation Center		1.8 miles
South Park	community park, 18 acres	1.96 miles
Exposition Park	regional park, 160 acres	2.2 miles (approx)
Fred Roberts Recreation Center		2.33 miles
48 th Street Park	pocket park	2.5 miles
Augustus Hawkins Park	nature park, 8 acres	2.8 miles

- Trinity Park and Recreation Center:
 - Amenities include: auditorium, basketball courts (lighted/outdoor), children’s play area, gymnasium, kitchen, pre-school room
- Central Recreation Center/ Central Playground
- Central Ave Jazz Park:
 - Where annual Central Jazz Festival is held
 - Seldom used throughout the remainder of the year¹³
 - Usually in a state of disrepair
- Gilbert Lindsay:
 - Field conditions in disrepair due to misuse by residents with off-road vehicles¹⁴
 - Park is used mostly by local teenagers during daytime hours, with little activity by parents and small children.¹⁵
 - Activity is decreased by nighttime due to safety concerns
 - Amenities include: barbeque pits, baseball diamond (lighted), basketball courts (lighted), children’s play area, football field (lighted), picnic tables, soccer field (lighted), skate park
- St. James Park:
 - park is unstaffed, unlocked, open from dawn to dusk
 - Amenities: children’s play area, sand box

- Ross Snyder Playground and Rec. Center:
 - Popular recreational destination in South Los Angeles on weekdays and weekends for adults, teenagers and families, especially in evening when most adults have come home from work.¹⁶
 - Close to public transportation and to Jefferson High School
 - Amenities include: auditorium, barbeque pits, baseball diamond (lighted), basketball courts (lighted/indoor & outdoor), children’s play area, indoor gym, picnic tables, outdoor pool (unheated), soccer field (lighted), tennis courts (unlighted), volleyball courts (unlighted).
- Hoover Recreation Center:
 - Amenities include: auditorium, barbeque pits, basketball courts (unlighted/outdoor) , children’s play area , indoor gym, picnic tables, gymnasium, kitchen, stage
- South Park:
 - Open space used for locals for recreational sports
 - Recreation center amenities include: baseball diamond (lighted), basketball courts, children’s play area, picnic tables, seasonal pool (outdoor/unheated), tennis courts (lighted), gymnasium, kitchen, outdoor stage
 - Frequented mostly by adults, seldom used after daylight hours, “fear of illicit activities and criminal element prevents many parents from allowing their children to play in the park out of safety concerns¹⁷”
- Exposition Park:
 - Amenities include: EXPO Center that includes a 50 meter competition pool, recreation center (two gyms, fitness facility, teen center), recreation pool, child care center, senior citizen center, outdoor amphitheatre, and rose garden.
 - Visited frequently on school field trips
 - Used for cultural events, sporting events, weekend picnics for residents w/in walking dist.
- Fred Roberts Recreation Center:
 - Barbeque pits, basketball courts (lighted/outdoor), childrens play area, community room, picnic tables, soccer field, volleyball courts (lighted)
- 48th Street Park:
 - unstaffed, open 24 hours a day
 - amenities include: basketball courts, children’s play area, picnic tables
- Augustus Hawkins Park:
 - Newest park to South LA
 - Residents walk, bike and drive to this park¹⁸
 - Amenities include: event facilities, nature center, bird watching, walking areas, picnic areas and community gardening opportunities
 - Popular on the weekends for families

Community School Parks

Across the country from Santa Monica and Malibu to New York City, a number school districts and cities are working together to increase the availability of and access to open space and recreational facilities through the development of Community School Parks (CSP’s). In December of 2007 the Los Angeles City Council adopted a motion in support of

a cooperative initiative between the City and Los Angeles Unified School District (LAUSD) to work to establish parks that would serve both schools and the greater community. A CSP working group was formed that includes representatives from LAUSD, the City of LA, SEIU, and local community organizations, and has identified the 28th Street Elementary School (located in direct proximity to The Crossings) as a CSP pilot site. This CSP will focus on enhancing the 28th Street elementary school playground with physical and landscaping (“greening”) features, and high-quality, supervised activity programming.¹⁹

A number of community partners, including the Santa Monica Mountains Conservancy and the Douglas Foundation are beginning to invest in CSP models. Other local efforts and resources that are aligned with the initiative to establish CSP’s include the Million Trees LA initiative to plant one million trees throughout the city over the next several years, proposition 84 funds, Trees for a Green L.A., Proposition A (County Open Space District Excess Funds), City of Los Angeles Proposition K, Community Development Block Grants, and the new L.A. City Recreation and Parks Foundation.²⁰ Additionally, in November 2008, Measure Q, the school bond for “safe, healthy neighborhood schools”, was approved by voters, and as a result, has allocated \$7 Billion towards improving LAUSD school facilities.

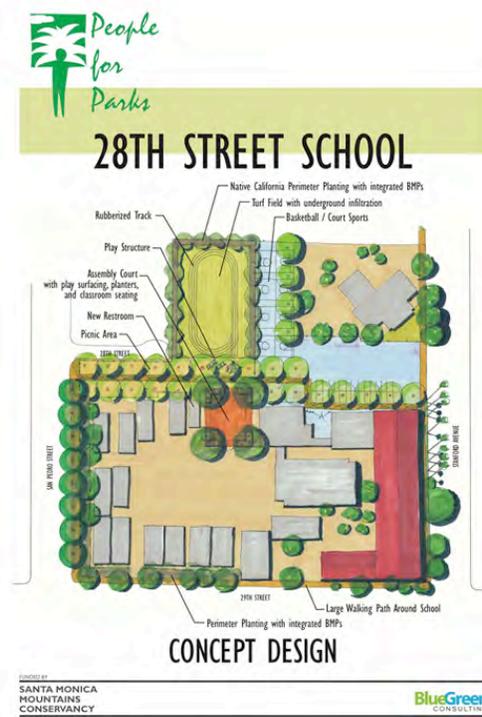
C. Analysis

Through this HIA we focused on understanding how the addition of park and recreational space within The Crossings project area could address local community needs related to parks and recreation.

The Crossings plan for park space

Based on the composite site plan of The Crossings, a “parkway” or contiguous park space will be established between the housing units along 29th and 31st Streets between San Pedro Street and Griffith Avenue. The plans also call for a playground, recreation facility and picnic/barbeque areas within this open space.

Additional park and recreation space is also being proposed as part of the LAUSD/City of LA Community School Park initiative, which has identified at the 28th Street School as a pilot site. Design plans for this CSP include an enclosed park, a track, a quiet sitting area, a playset, and an employee parking lot that doubles as a hard-surface playground after school, as well as outdoor classrooms, assembly areas and additional restrooms.



Community Perspectives on the Need for Parks

More than 75% (192 individuals) of local residents who responded to the community survey considered “Parks and Recreational Facilities” to be one of the top three priority public services that they would like to see more of in their community (libraries and health centers were the other two priorities). Narrative responses also indicated that residents in the area around The Crossings desire to have more places where they can spend time with their families, and that parks are one of the types of places that they would like to be able to frequent with their families.

Residents living in the vicinity of The Crossings shared the following types of concerns regarding the lack of parks in the community:

- *There are a lack of recreational activities for adults that could be offered in parks*
- *There are a lack of recreational opportunities for young people, especially during the summer*
- *There are a lack of places to relax with the family*
- *Kids can not play outdoors*

Impacts of Parks on Health

Parks and open space impact health through several mechanisms, including physical activity, mental health, environmental quality, illness, safety, and social cohesion.

Physical Activity

In 1996 the U.S. Surgeon General concluded that regular physical activity improves health. The Surgeon General’s report found that exercise prolongs life and prevents diabetes, high blood pressure and colon cancer; that exercise controls weight, improves mobility in the elderly, and prevents falls; and that exercise reduces feelings of depression and anxiety and

promotes psychological well-being.²¹ The Center for Disease Control (CDC) recommends that adults should either engage in moderate exercise (e.g., walking briskly) for at least 30 minutes 5 days a week, or in vigorous exercise (e.g., jogging) for at least 20 minutes 3 days a week. Children should get some combination of moderate and vigorous exercise for at least one hour a day. Without outdoor places to play, children are less likely to exercise regularly and may face elevated risks for diabetes, obesity, and asthma.²²

People who live in close proximity to parks usually have higher levels of activity compared to those who do not.^{23 24 25} One study published by the CDC, showed that creation of or enhanced access to places for physical activity led to a 25.6% increase in the percentage of people exercising on three or more days per week.²⁶ Research has also shown that access to places for physical activity combined with outreach and education can produce a 48% increase in frequency of physical activity.²⁷

Studies have shown that parks facilitate physically active lifestyles by providing relatively low cost choices for recreation.²⁸ Nationally, about 30% of physically active people report exercising in public parks.²⁹ In a study about Los Angeles, active people who live within two miles of a park are more likely to exercise in the parks (34%) than at home (21%), at private clubs (6%), or at other locations (4%), although many people (35%) reported exercising in more than one location. Most (81%) users of a park live within one mile of it. People living within one mile of the park were four times as likely to visit the park once per week or more.³⁰

Community Perspectives on Physical Activity

More than 27% of local residents who responded to the community survey indicated that they exercise once a week or less, and 38% said that they rarely exercise.

Mental Health & Recovery from Illness

A growing body of research shows that contact with the natural world improves physical and psychological health. Parks and open spaces provide needed reprieve from everyday stressors, acting as “escape facilities.” Being able to escape fast-paced urban environments improves health by reducing stress and depression and improving the ability to focus, pay attention, be productive, and recover from illness.³¹ A study published in 2001 in the Netherlands showed the link between green space and health, finding that “in a greener environment people report fewer health complaints, more often rate themselves as being in good health, and have better mental health,” and, “when it comes to health, all types of green seem to be equally ‘effective.’” The study found the same benefit from living near city parks, agricultural areas, and forests.³² Another study in Chicago showed that people living in a housing project near green space scored higher on the ability to manage major life issues, procrastinated less, found their issues to be less difficult and reported them to be less severe and long-standing than those who lived in barren surroundings.³³ Additional research has demonstrated that patients with views of trees vs. views of a brick wall had shorter hospitalizations, less need for painkillers, and fewer negative comments in the nurses’ notes.³⁴

Spending time in parks can reduce irritability and impulsivity as well as promote intellectual and physical development in children and teenagers. Researchers in Chicago found that children with Attention Deficit Disorder (ADD) function better than usual after activities in

green settings, and that the “greener” a child’s play area, the less severe their ADD symptoms.³⁵

Conversely, research has quantified that people dissatisfied with green spaces available to them have a 2.4 times higher risk for mental health issues.³⁶

Social Cohesion

In addition to offering recreational opportunities for youth and families, urban parks provide a space where people can experience a sense of community and increase neighborhood cohesion. Social networks and interaction have been linked to improvements in physical and mental health through multiple mechanisms.³⁷ In a study in Chicago, observations of vegetated areas with trees and grass found that green spaces contained on average 90% more people. Additionally, 83% more people were involved in social activities in green spaces vs. barren spaces.³⁸

Planning parks can offer an opportunity to unite neighbors, and spending time together outdoors promotes the kind of community cohesion that fights crime, increases property values, and improves quality of life. After parks open, neighborhood residents are more likely to interact, take pride in their communities, and form neighborhood watch and other local improvement groups.³⁹

Environmental Quality

Parks and open spaces improve environmental quality by filtering dirty air and polluted water, and by dampening noise, thereby contributing to the general health of the area. Unpaved parks and open spaces alleviate pressures on storm water management and flood control efforts by slowing and filtering water flow and decreasing the area of impervious surfaces. Trees and green space remove pollution from the air, mitigating heat island effects in urban areas, which lower energy demands and associated emissions during warm periods. Evaporation from a single large tree can produce the cooling effect of ten room-size air conditioners operating 24 hours a day.⁴⁰ In an area with 100% tree cover (such as forest groves within parks), trees can remove as much as 15% of the ozone, 14% of the sulfur dioxide, 13% of particulate matter, 8% of the nitrogen oxide, and .05% of the carbon monoxide.⁴¹ Trees and the soil under them filter water pollution by removing polluted particulate matter from water before it reaches storm sewers, and absorbing nutrients created by human activity such as nitrogen, phosphorus and potassium, which otherwise pollute streams and lakes.⁴² In addition, increased vegetation dampens sound and mitigates noise pollution.⁴³

Crime and Safety

Crime and perception of crime deter use of existing public spaces, and in South Los Angeles have resulted in a degraded physical environment, a weakened sense of place, and contribute to social isolation.⁴⁴ While safety concerns may currently discourage local residents from frequenting existing parks and recreational areas in the vicinity of The Crossings, research has shown that community involvement in neighborhood parks is correlated with lower levels of crime.⁴⁵

Park-poor neighborhoods have been found to be more likely to suffer high crime rates and other symptoms of urban blight.⁴⁶ Access to public parks and recreational facilities has been

strongly linked to reductions in crime, and in particular, to reduced juvenile delinquency.⁴⁷ Recreational facilities keep at-risk youth off the streets, give them a safe environment to interact with their peers, and fill up time within which they could otherwise get into trouble.⁴⁸

Places such as Kansas City have reported success with “midnight basketball” programs that keep courts open late at night to give youth an alternative to potentially dangerous alternatives. Over a one-year period, Kansas City reported a 25% decrease in arrests of juveniles in areas where midnight basketball programs were offered. Similarly, crime in Fort Worth, Texas, dropped by 28% within a one-mile radius of community centers where midnight basketball was offered. In the areas around five other Fort Worth community centers where the programs were not offered, crime rose an average of 39% during the same period.⁴⁹

Community Perspectives on Park Safety

Results from the community survey show that, unfortunately, crime and lack of safety in park areas deter residents living near The Crossings from using local parks and other recreational spaces. Over 70% of the local residents surveyed indicated that they do not have safe access to parks and open spaces in their community. The following are some of the responses collected from the community survey regarding residents’ concerns about the safety of existing parks and recreational spaces:

- *I don't go to any park because of the crime activities*
- *I don't go to any [parks] because is too dangerous*
- *There aren't any [parks] close and the only one is too dangerous*
- *Too many drunks out in the park. I don't go there*
- *There are no parks near by and the only one closest to my neighborhood is frequented by many vandals and gangs*
- *Everything is in bad shape*
- *Trinity Park is not very safe; it is too small*

Despite survey respondent’s safety concerns about going to parks, however, when asked what they do with their families outside of the house, a number of respondents indicated that they go for walks, or go to a park. Some survey respondents maintained, however, that “it is not safe doing outdoor activities in this area [altogether].” Other respondents indicated that they travel to other parts of the city and county, such as Long Beach, the La Brea area, or Santa Monica to go to parks because they feel unsafe in the parks located in their own neighborhood. Additional comments in response to this question included mention of the lack of street lights in the area that contribute to safety concerns in the neighborhood.

Accessibility of parks

Whether a person chooses to use a park or open space is determined by many factors including:

- Proximity;
- Modes of transportation available for access (car, walkability, bikability, public transit);
- Safety and perceived safety;

- Availability of special facilities and programming (e.g., paved paths, benches for resting, organized sports)
- Cultural norms and preferences.

Together, these factors determine whether a park or recreation facility is accessible.

Parks and Recreation Facilities: Conclusions

Considering that parks in Los Angeles are least likely to be located in areas with high concentrations of young children, and that a high percentage of children and families reside in the area surrounding The Crossings (*see Housing section*), the establishment of park and recreation space at The Crossings clearly meets an existing community need.⁵⁰

Establishing park space at The Crossings offers the possibility for a number of new health promoting opportunities, and ways to mitigate existing health and safety concerns in the community. In order for park and recreational space at The Crossings to remain safe and accessible to local residents, measures should be taken to ensure that the uses of these spaces address specific community needs, and that the community is involved in planning and maintaining these areas.

While The Crossings will help to increase the amount of park space that residents in the greater community have access to, the development could have an additional impact on improving residents’ access to parks by improving access to transportation, including public transportation, to other established parks and recreation facilities. Additionally, improving transportation so that other local community residents who do not live on-site at The Crossings can access the park space and recreational opportunities at The Crossings is important. The benefit of having park and recreational space at The Crossings can also extend to local schools, such as the 28th Street Elementary School. However, if the new park and recreation space will attract local residents and/or school children to The Crossings, existing pedestrian safety concerns on the streets around the development need also be addressed (see Pedestrian Safety, Neighborhood Walkability & Public Transit section).

The Community School Park being designed as a pilot at the 28th Street School site offers the potential for additional park and recreational space for the community living in and around The Crossings development. In order to maximize benefits from this and the new park space being designed at The Crossings development, efforts should be made to coordinate the establishment of the two park projects.

D. Health-Promoting Mitigations for Parks and Recreation Facilities

Based on the results of the community survey as well as evidence linking health to the establishment of and access to parks and recreation facilities, we recommend the following mitigations for parks and recreation at The Crossings project site:

- Increase local residents’ access to public parks by improving transportation to parks and recreation facilities around the City and County of Los Angeles
- Ensure that transportation and safe pedestrian pathways to The Crossings park and recreation area are available for community residents who do not live at the project site
- Create pedestrian friendly pathways from the park space at The Crossings to other important neighborhood facilities (such as schools, grocery and other retail stores, etc.)

- Establish activities and uses for the park and recreation space that will increase the use of the space throughout the day in order to decrease crime and improve safety. Examples of these activities and park uses could include:
 - Street vendors
 - Outdoor games for youth (including, for example, midnight basketball)
 - Those that encourage use of the picnic and barbeque spaces at The Crossings
 - Establishment of public amenities such as benches and water fountains
- Ensure that buildings facing the park and recreation space have windows open to these areas to increase community surveillance
- Encourage public art in the park and recreation space(s) at The Crossings
- Provide trash cans as well as education about appropriate dump sites for trash to avoid litter and illegal dumping in park and recreation areas
- Urban Housing Communities (UHC) should work with LA ACORN, the 28th Street Elementary School and other community organizations to develop an educational outreach plan to disseminate information about recreation and other park related activities being offered at The Crossings
- UHC should work in conjunction with the City of Los Angeles and LAUSD through the CSP initiative to coordinate efforts to design and establish park space at The Crossings and the 28th Street School Site.
- UHC and LA ACORN should initiate discussions with residents living (or who will be living) at The Crossings about how to establish a safety plan that includes particular attention to the park and recreation area of the development
- If the park space at The Crossings is conducive to the establishment of a community garden, Urban Housing communities should consider working with a community organization to establish a community garden project on-site at the development
- In the future, UHC should consider working with organizations like the Trust for Public Land to encourage the establishment of new parks, such as the park developments in the City of Maywood in Los Angeles County, where establishment of seven-acre park acquisition project near the LA River has served to double park acreage in the city, and improve the quality of life for local residents in this low-income community.⁵¹ In order to do this, UHC should consider the possibility of tapping into resources such as California's Proposition 40, that created a \$2.6 billion fund for environmental projects throughout the state, sets aside funding for urban parks creation, and give special preference to park projects developed with private sector partners.

E. Conclusion

From the perspective of the health effects mediated through parks and recreation facilities, this analysis concludes that the establishment of park space and recreational opportunities at The Crossings would have many positive health impacts for existing residents living in and around the project site. There is a clear lack of existing parks and accessible recreational facilities in the neighborhood surrounding The Crossings/ 29th St./ San Pedro St. area, and an evident community need for the benefits and amenities that both parks and recreational opportunities bring. Establishing a park at The Crossings has the potential to help support increased physical activity, better mental health, more extensive social networks, and improved safety for local residents.

While designating an area in The Crossings' site plan as park space is one step towards

improving park access for the local community, additional measures to establish activities and uses of the space as well as maintain the quality and safety of the area are necessary in order to ensure that the park's positive health benefits will be maximized, and that this area will not attract health compromising activities. Many of the factors that will ultimately determine the degree to which the new park will lead to improved health have not been determined at this stage in the planning. The recommendations made in this section should be kept in mind as planning for The Crossings at 29th Street moves forward.

From a health perspective, it is important that Urban Housing Communities and any of its collaborating partners understand the needs of local residents regarding parks and recreation facilities, and that they understand how existing parks and recreation facilities fall short of providing for those needs. The Crossings provides a unique opportunity to address health issues mitigated by parks and recreation facilities, and improve the health and quality of life for residents in the greater community.

References

¹ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.

² “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.

³ Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology. Los Angeles County Health Survey, 2005.

⁴ Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.

⁵ Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.

⁶ Centers for Disease Control. Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services. October 26, 2001. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5018a1.htm>

⁷ Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology. Los Angeles County Health Survey, 2005.

⁸ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.

⁹ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.

¹⁰ Scoch, Deborah. 2007. How can L.A. Create Better Places to Play? Los Angeles Times. June 1, 2007 (As found in “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.)

¹¹ Mendez, Michael Anthony. 2003. Latino Lifestyle & the New Urbanism: Synergy against Sprawl. Boston, MA: Massachusetts Institute of Technology. Latino Issues Forum. [*found in Public Spaces*]

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- ¹² “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹³ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹⁴ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹⁵ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹⁶ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹⁷ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹⁸ “Public Space: a catalyst for the regeneration of South Los Angeles”. Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ¹⁹ Parks for People Los Angeles. www.peopleforparks.org
- ²⁰ Parks for People Los Angeles. www.peopleforparks.org
- ²¹ Physical Activity and Health: A Report of the Surgeon General is available at <http://www.cdc.gov/nccdphp/sgr/sgr.htm>
- ²² Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.
- ²³ Powell DE, Martin LM, Chowdhury PP. 2003. Places to walk: Convenience and regular physical activity. *American Journal of Public Health* 93(9):1519-1521.
- ²⁴ Humpel N, Owen N, Leslie E. 2002. Environmental factors associated with adults participation in physical activity: A review. *American Journal of Preventive Medicine* 22(3):188-199.
- ²⁵ Takano T, Nakamura K, Watanabe M. 2002. Urban residential environments and senior citizens longevity in megacity areas; the importance of walkable green.
- ²⁶ Centers for Disease Control. Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services. October 26, 2001. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5018a1.htm>
- ²⁷ Kahn EB. The effectiveness of interventions to increase physical activity. *American Journal of Preventive Medicine*. 2002;22(4):73-107.
- ²⁸ Transportation Research Board, Institute of Medicine of National Academies, 2005. Does the built environment influence physical activity? Examining the evidence. National Academies of Science.
- ²⁹ Brownson, R.C., et al., Environmental and policy determinants of physical activity in the United States. *American Journal of Public Health*, 2001. 91(12): p. 1995-2003.
- ³⁰ Cohen, D., et al., Park Use and Physical Activity in a Sample of Public Parks in the City of Los Angeles. 2006, RAND Corporation.
- ³¹ Maller C, Townsend M, Pryor A, Brown P, St. Leger L. 2005. Healthy nature healthy people: ‘contact with nature’ as an upstream health promotion intervention for populations. *Health Promotion International* 21(1):45-53.
- ³² Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.
- ³³ Kuo FE. 2001. Coping with poverty impacts of environment and attention in the inner city. *Environment and Behavior* 33(1):5-34.

-
- ³⁴ Ulrich RS. 1984. View through a window may influence recovery from surgery. *Science* 224:421.
- ³⁵ Taylor AF, Kuo FE, Sullivan WC. 2001. Coping with ADD: The surprising connection to green play settings. *Environment and Behavior* 33(1):54-77.
- ³⁶ Guite HF, Clark C, Ackrill G. 2006. The impact of physical and urban environment on mental well-being. *Public Health* 120:1117-1126.
- ³⁷ Berman LF, Glass T, Brissette IC, Seeman TE. 2000. From social integration to health: Durkheim in the new millennium. *Social Science and Medicine* 51:843-857.
- ³⁸ Sullivan WC, Kuo FE, DePooter Sf. 2004. The fruit of urban nature: Vital neighborhood spaces. *Environment and Behavior* 36(5):678-700.
- ³⁹ Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.
- ⁴⁰ US Dept of Agriculture, Forest Service pamphlet #FS-363, cited in Benefits of Trees in Urban Areas. Colorado Tree Coalition. Available at <http://www.coloradotrees.org>.
- ⁴¹ Sherer PM. 2003. Parks for people: Why America needs more city parks and open space. San Francisco: The Trust for Public Land. Available at <http://www.tpl.org/>.
- ⁴² Nowak DJ. The effects of urban trees on air quality. U.S. Dept of Agriculture Forest Service. Washington DC. Available at <http://www.fs.fed.us/ne/syracuse/gif/trees/pdf>.
- ⁴³ Beattie J, Kollin C, Moll G. 2000. Trees help cities meet clean water regulations. *American Forests*. Available at <http://www.americanforests.org/downloads/graytorgreen/treeshelpcities.pdf>.
- ⁴⁴ "Public Space: a catalyst for the regeneration of South Los Angeles". Prepared for the Community Redevelopment Agency of Los Angeles. 606 Studio. Department of Landscape Architecture, College of Environmental Design, California State Polytechnic University, Pomona, 2007.
- ⁴⁵ Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.
- ⁴⁶ Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.
- ⁴⁷ Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.
- ⁴⁸ Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.
- ⁴⁹ Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.
- ⁵⁰ Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.
- ⁵¹ Trust for Public Land. No Place to Play: a comparative analysis of park access in seven major cities. November 2004.

Appendix A: Established Standards and Health Objectives

Housing Standards and Health Objectives

U.S. Department of Health and Human Services *Healthy People 2010*:

- Goal 8-23: Reduce the proportion of occupied housing units that are substandard.

US Dept. of Housing and Urban Development Strategic Plan Objectives:

- A. Increase home ownership opportunities
 - A1: Expand national home ownership opportunities.
 - A2: Increase minority home ownership.
 - A5: Help HUD-assisted renters become home owners.
 - A6: Keep existing home owners 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.
 - C4: End chronic homelessness and move homeless families and individuals to permanent housing.
 - C5: Address housing conditions that threaten health.

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.

California General Plan Guidelines (2003):

- The 2003 State of California General Plan Guidelines call for ensuring environmental sustainability by matching employment potential, housing demand by income level and type and new housing production.

California Government Code Section 65584:

- Requires that the Department of Housing and Community Development, with local Council of Governments, determine the existing and projected need for housing for each region of the state. The objectives of doing so are stated to be:
 - (1) Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in each jurisdiction receiving an allocation of units for low- and very low-income households;
 - (2) Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns;
 - (3) Promoting an improved intraregional relationship between jobs and housing;

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(4) Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category, as compared to the countywide distribution of households in that category from the most recent decennial United States census.¹

City of LA General Plan, Housing Element:²

- Goal 1: A City where housing production and preservation results in an adequate supply of ownership and rental housing affordable to people of all income levels, races, ages, and suitable for all needs.
 - Objective 1.1: Encourage production and preservation of an adequate supply of rental and ownership housing to meet the identified needs of persons of all income levels and special needs.
 - Objective 1.2: Provide and maintain the technical resources to evaluate the availability of the housing supply in relation to identified needs.
 - Objective 2.6: Educate the public on lower income and special housing needs
 - Policy 2.6.1: Implement an educational program on affordable housing needs.
 - Policy 3.1.2: Encourage the inclusion of three, four, and five bedroom units in all residential projects in order to accommodate larger families.
 - Objective 4.1: Establish additional production incentives for developers of affordable lower-income, special needs, and market-rate housing.
 - Policy 4.1.1: Continue to facilitate the development of multiple-bedroom dwelling units for large families.
 - Policy 4.2.1: Expedite processing of new housing development and rehabilitation projects affordable to low and very low income households.

Additional Guidelines:

Housing Affordability

- According to federal guidelines, housing is considered to be affordable when residents spend less than 30% of their income on rent.

Housing Overcrowding

- The most common measure of overcrowding is persons-per-room in a dwelling unit.
- Overcrowding, as defined by the U.S. Department of Housing and Urban Development (HUD), is having more than 1 person living in a habitable room, and having more than 1.51 people residing in a habitable room is considered to be severe overcrowding.
- Other measures of overcrowding include: the total number of persons in a unit, regardless of unit size; the ratio of persons to floor space in square feet; and the person-to-size ratio adjusted for household composition, structure type, location, or lot size.³

Pedestrian Safety/Walkability Standards

U.S. Department of Health and Human Services *Healthy People 2010*:

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The US Department of Health and Human Services (USDHHS) establishes national objectives for health.⁴ By 2010, the following objectives related to walkability and bikability should be achieved:

Pedestrian Injuries

- Objective 15-16: Reduce annual pedestrian deaths on public roads to less than 1/100,000.
- Objective 15-18: Reduce annual nonfatal pedestrian injuries on public roads to less than 19/100,000.

Physical Activity

- Objective 22-2: Increase the number of adults who engage in regular, preferably daily, in moderate physical activity for 30 minutes per day.
- Objective 22-7: Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

California Vehicle Code:

- The 2002 California Vehicle Code (CVC) section 21949 states: “The Legislature hereby finds and declares that it is the policy of the State of California that safe and convenient pedestrian travel and access, whether by foot, wheelchair, walker, or stroller, be provided to the residents of the state.”⁵
- CVC Section 21950 states: “The driver of a vehicle shall yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection, except as otherwise provided in this chapter.” Further, it states: “This section does not relieve a pedestrian from the duty of using due care for his or her safety. No pedestrian may suddenly leave a curb or other place of safety and walk or run into the path of a vehicle that is so close as to constitute an immediate hazard. No pedestrian may unnecessarily stop or delay traffic while in a marked or unmarked crosswalk.”⁶

City of Los Angeles’s General Plan (adopted in 1999)⁷:

The General Plan contains a Transportation Element with a specific goal and a set of objectives regarding pedestrians and bicyclists:

- Goal C: An integrated system of pedestrian priority street segments, bikeways, and scenic highways which strengthens the City's image while also providing access to employment opportunities, essential services, and open space.
 - Policy 10-1: Implement the updated and revised 1996 City Bicycle Plan.
 - Policy 10.2: Continue completion of the Highways and Freeways system utilizing the cross sections presented in Chapter VI of this element, which provide for wider sidewalks / parkways along arterial streets, and link implementation of streetscape guidelines to street widening projects.
 - Policy 10.3: Identify pedestrian priority street segments in Community Plans and implement guidelines to develop, protect, and foster the pedestrian oriented nature of these areas.
 - Policy 10.4: Expedite the implementation of the streetscape guidelines and standards set forth in this Transportation Element (Chapter VI-C* .) for pedestrian priority and

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transit priority streets as funding allows.

- Policy 10.5: Ensure that sidewalks along all designated major and secondary highways are maintained at a minimum ten (10)-foot width pending full dedication and improvement of these streets to the standards set forth in this Element.
- Policy 10.6: Consider school child safety as a priority over vehicular movement on all streets regardless of highway classifications.
- The General Plan also contains a Bicycle Plan with the following stated goal:
 - A transportation system which is accessible, safe, and convenient for bicycle travel, with an accompanying increase in bicycle mode split both in daily trips overall and home-to-work trips. The target level of bicycling shall be 5% of all daily trips and 5% of home-to-work trips by year 2015.

This plan has many objectives and policies regarding creating an environment that is friendlier towards bicyclists.

Governors Environmental Goals and Policy Report (2003)⁸

- Provide 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.

Health Services Standards and Guidelines

U.S. Department of Health and Human Services *Healthy People 2010*

- HP 2010 objective 1-1: Proportion of persons with health insurance. Target = 100% coverage.⁹
- HP 2010 objective 1-2: Increase the proportion of insured persons with coverage for clinical preventive services.¹⁰
- HP 2010 objective 1-4: Proportion of persons who have a specific source of ongoing care. Target = 96%.¹¹
- HP 2010 objective 1-6: Reduce the proportion of families that experience difficulties obtaining health care or do not receive needed care for one or more family members. Target = 7%.¹²
- HP 2010 objective 1-11: Increase the proportion of persons who have access to rapidly responding pre-hospital emergency medical services.¹³
 - In urban areas, this capability is defined by an interval of less than 5 minutes from the time an emergency call is placed to arrival on the scene for at least 90 percent of first-responder emergency medical services and less than 8 minutes for at least 90 percent of transporting EMS.

Healthy Development Measurement Tool (HDMT)

Developed by the San Francisco Department of Public Health, the Healthy Development Measurement Tool (HDMT) is a comprehensive evaluation metric to consider health needs in urban development plans and projects. With this tool, development projects can be compared to established development targets that would maximize population health.

- The HDMT development targets typically advise development projects to be within one half-mile of hospitals and public health clinics.

Food Retail Standards and Guidelines

U.S. Department of Health and Human Services *Healthy People 2010*

- While promoting physical activity, reducing obesity, promoting mental health and well-being, and promoting healthy environments are all leading health objectives included in the, no available standards exist for access to local retail services.

Healthy Development Measurement Tool

- The HDMT development targets for neighborhood-serving retail typically advise development projects to be within a half-mile of supermarkets, retail food markets (including supermarket, produce store and other retail food stores), and eating establishments (restaurants and cafes).¹⁴

Education/Afterschool Program Standards

U.S. Department of Health and Human Services *Healthy People 2010*

- Objective 22.12: Increase the proportion of the Nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours.

California Code of Regulations, Title 5, §14010 Standards for School Site Selection¹⁵

- The site shall be located within the proposed attendance area to encourage student walking and avoid extensive bussing unless bussing is used to promote ethnic diversity.
- The site shall be selected to promote joint use of parks, libraries, museums and other public services.

California Public Schools Accountability Act¹⁶

- Public schools should improve their performance each year by 5% of the difference between their API and the statewide target of 800, with a minimum target of five points' growth.

California State Board of Education¹⁷

- All schools in California must achieve an API of 800 by 2014.

Quality Standards for Oakland After-School Programs¹⁸

- The program site is accessible to youth, with access to public transportation or other means, reasonable accommodations for people with disabilities.
- Youth are physically safe on the way to and from the program.

Parks and Recreation

U.S. Department of Health and Human Services *Healthy People 2010*:¹⁹

Physical Activity

- Objective 22-12: Increase the proportion of the Nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal

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school hours (that is, before and after the school day, on weekends, and during summer and other vacations).

- Objective 22-14: Increase the proportion of trips made by walking.
- Objective 22-15: Increase the proportion of trips made by bicycling.

City of Los Angeles's General Plan (adopted in 1999):²⁰

- The City's open space policies seek to resolve issues, including the deficiency of open space in the City:
 - “Existing open space standards (and, more significantly, existing open space acquisition policies) do not sufficiently recognize the full range of potential open space resources at the neighborhood and community levels. As opportunities for traditional open space resources are diminished, it is important to identify areas of open space that have not traditionally been considered as resources. Thus, vacated railroad lines, drainage channels, planned transit routes and utility rights-of-way, or pedestrian-oriented streets and small parks, where feasible, might serve as important resources for serving the open space and recreation needs of City residents in communities where those resources are currently in short supply. Additionally, as resources diminish, the quality, intensity, and maintenance of existing open space (especially in more dense neighborhoods) becomes more important.”
- Objective 6.4: Ensure that the City's open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass.
 - 6.4.1: Encourage and seek to provide for usable open space and recreational facilities that are distributed throughout the City
 - 6.4.2: Encourage increases in parks and other open space lands where deficiencies exist, such as South East and South Central Los Angeles and neighborhoods developed prior to the adoption of the State Quimby Act in 1965 (As amended in 1972).
 - 6.4.3 Encourage appropriate connections between the City's neighborhoods and elements of the Citywide Greenways Network.
 - 6.4.4 Consider open space as an integral ingredient of neighborhood character, especially in targeted growth areas, in order that open space resources contribute positively to the City's neighborhoods and urban centers as highly desirable places to live
 - 6.4.5 Provide public open space in a manner that is responsive to the needs and wishes of the residents of the City's neighborhoods through the involvement of local residents in the selection and design of local parks. In addition to publicly-owned and operated open space, management mechanisms may take the form of locally run private/non-profit management groups, and should allow for the private acquisition of land with a commitment for maintenance and public access.
 - 6.4.7 Consider as part of the City's open space inventory of pedestrian streets, community gardens, shared school playfields, and privately-owned commercial open spaces that are accessible to the public, even though such elements fall

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outside the conventional definitions of "open space." This will help address the open space and outdoor recreation needs of communities that are currently deficient in these resources

- 6.4.8 Maximize the use of existing public open space resources at the neighborhood scale and seek new opportunities for private development to enhance the open space resources of the neighborhoods.
 - Encourage the development of public plazas, forested streets, farmers markets, residential commons, rooftop spaces, and other places that function like open space in urbanized areas of the City with deficiencies of natural open space, especially in targeted growth areas.
 - Encourage the improvement of open space, both on public and private property, as opportunities arise. Such places may include the dedication of "unbuildable" areas or sites that may serve as green space, or pathways and connections that may be improved to serve as neighborhood landscape and recreation amenities.
 - 6.4.10: Provide for the joint use of open space with existing and future public facilities, where feasible.
 - Give priority to the development of sites as open space for public access that are located with or occupied by other public facilities such as schools, child care facilities, and libraries.
 - Resolve differences of policy and practice between the City's various departments and the Los Angeles Unified School District to ensure the joint use of school sites in whole or in part for neighborhood open space needs. In particular, pursue legislation to address the issue of public liability in situations of joint use or joint development of public properties, so that the liability may be equitably shared by multiple agencies
 - 6.4.11: seek opportunities to site open space adjacent to existing public facilities, such as schools, and encourage the establishment of mutually beneficial development agreements that make privately-owned open space accessible to the public. For example, encourage the improvement of scattered small open spaces for public access in private projects with small branch libraries, child care centers, or decentralized schools.
- Objective 6.5.5 Establish incentives for the provision of publicly accessible open space in conjunction with private development projects.

Proposition K – “The Citywide Parks, Recreation and Community Facilities Assessment Referendum Ordinance”

- Passed on November 5, 1996, Prop K generates \$25 million per year for 30 years through a real-property tax assessment. In total, Prop K allocates \$298,850,000 over its lifespan for 183 projects specified within the language of the ordinance. Another \$143,650,000 will be allocated through a competitive grant process that will fund capital improvements, maintenance, and land acquisition.

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- Passed on March 5, 2002, the "California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002" allocates 2.6 billion dollars towards environmental projects throughout the state, including funding for urban parks creation that gives special preference to park projects developed with private sector partners.

References

- ¹ <http://law.onecle.com/california/government/65584.html>
- ² <http://www.lacity.org/PLN/cwd/gnlpln/index.htm>
- ³ The Healthy Development Measurement Tool. Indicator HH.1.d Proportion of households living in overcrowded conditions, Explanations and Limitations. Accessible at: www.thehdm.org.
- ⁴ United States Department of Health and Human Services. Healthy People 2010. Available at <http://www.healthypeople.gov/>
- ⁵ Available at: <http://www.dmv.ca.gov/pubs/vctop/d11/vc21949.htm>. Accessed November 16, 2008.
- ⁶ Available at: <http://www.dmv.ca.gov/pubs/vctop/d11/vc21950.htm>. Accessed November 16, 2008.
- ⁷ <http://www.lacity.org/PLN/cwd/gnlpln/index.htm> .
- ⁸ Governor's Environmental Goals and Policy Report. State of California, Governor's Office of Planning and Research. November 10, 2003; p. 134.
- ⁹ Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. Healthy People 2010 Objectives: HP 2010 1-1. Available at : http://www.healthypeople.gov/Document/HTML/Volume1/01Access.htm#_Toc489432813
- ¹⁰ Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. HP 2010 objective 1-2. Available at: <http://www.healthypeople.gov/>
- ¹¹ Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. HP 2010 objective 1-4. Available at: <http://www.healthypeople.gov/>
- ¹² Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. HP 2010 objective 1-6. Available at: <http://www.healthypeople.gov/>
- ¹³ Healthy People 2010, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. HP 2010 objective 1-11. Available at: <http://www.healthypeople.gov/>
- ¹⁴ San Francisco Department of Public Health, 2006. Healthy Development Measurement Tool. Objective PI.6 Assure access to daily goods and service needs, including financial services and healthy foods. Available at http://www.thehdm.org/objective.php?element_id=4&objective_id=62
- ¹⁵ <http://www.cde.ca.gov/LS/fa/sf/title5regs.asp>
- ¹⁶ <http://www.cde.ca.gov/ta/ac/pa/>
- ¹⁷ California State Board of Education Accessed at www.lhc.ca.gov/lhcdirectory/edgov/BordenOct07.pdf
- ¹⁸ After-School Coordinating Team in Oakland, Accessed at www.safepassages.org/reports/quality.pdf
- ¹⁹ United States Department of Health and Human Services. Healthy People 2010. Available at <http://www.healthypeople.gov/>
- ²⁰ <http://www.lacity.org/PLN/cwd/gnlpln/index.htm>

Appendix B: Community Survey: 29TH Street Redevelopment Area

Survey Background and Purpose:

ACORN is working to implement and organize a multi-faceted initiative for the neighborhood surrounding a new redevelopment area between 29th and 31st streets and San Pedro Street and Griffith Avenue. In order to reduce the existing environmental health and economic disparities in the community, ACORN has pushed the City of Los Angeles for development projects that would remake this four-block area around the 28th Street Elementary School. ACORN members have successfully called for the transformation of zoning, reducing the amount of land for industrial use, and asked for the closure of Palace Plating, one of several small industrial polluters in the area.

The input from this survey will help ACORN identify important issues to address when analyzing the city's proposals for the redevelopment area and in its advocacy for the community's needs through this redevelopment process.

Urban Housing Communities LLC has been selected by the city to redevelop this area in a five-phase workforce/affordable housing community that will provide over 450 units of family housing. The project is called "The Crossings at 29th Street". Urban Housing Communities will take into consideration the results of this survey while planning this development.

ENVIRONMENTAL ISSUES

1. Are you concerned about air quality in your community?

- Yes No I don't know.

If so, what is the main source of your concern? (e.g., exhaust from local trucks or from the freeways, industrial pollution)

2. Are you concerned about water quality in your community?

- Yes No I don't know.

If so, what is the main source of your concern? (e.g., pollution from industry)

3. Are you concerned about noise in your community?

- Yes No I don't know.

If so, what is the main source of your concern? (e.g., traffic, industry)

4. Are you concerned about the condition of your housing?

- Yes No I don't know

If so, what is the main source of your concern? (e.g., lead paint, mold, air quality, physical condition, insects)

5. Is your neighborhood walkable and/or bikeable?

- Yes No I don't know

If not, why not? (e.g., too much traffic, inadequate sidewalks, streets too hard to cross, too much crime)

6. Do you have other concerns about the environmental quality in your neighborhood? Is so, please list those.

A. COMMUNITY HEALTH ISSUES

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Appendix B: Community Survey

7. Are there affordable and accessible health clinics in your community?

- Yes No I don't know

If so, which do you use? _____

8. Are your children immunized

- Yes No I don't know

9. Does your family receive regular health check-ups (health, dental, vision)?

- Yes No

10. Do you have health insurance?

- Yes No I don't know

If so, is it provided by the employer of a family member?

- Yes No I don't know

11. Do you have safe access to parks and open spaces at a walkable distance in your community?

- Yes No I don't know

If so, which do you use? _____

12. How often do you exercise that **is not** related to your work? (at a park, recreation center, or by walking, biking, etc.)

- Every day
 Between 2 and 6 days a week
 Once a week
 Once every two weeks
 Once a month
 Rarely

13. How often do you eat fresh fruit and vegetables?

- Every day
 Between 2 and 6 days a week
 Once a week
 Rarely

14. Are there affordable and accessible supermarkets and/or fruit and vegetable stores in your community?

- Yes No I don't know

If so, which do you use? _____

15. What modes of transport do you rely on most?

- Car/Motorcycle Bus Walking/biking

16. Do you own a car?

- Yes No

Appendix B: Community Survey

If so , how many cars? _____

17. Do you have easy accessibility to the public transit system?

- Yes No

Comments _____

18. Is there sufficient public transit to get you where you need to go (work, shopping, etc.)?

- Yes No I don't know

If not, what is the main issue (e.g., not frequent enough, not close enough to home, too many connections)?

19. It is hard for you to pay the mortgage/rent some months?

- Yes No I don't know

20. Have you had friends and/or relatives move out of your neighborhood because they could not afford to live there any more?

- Yes No I don't know

21. Do you or does anyone in your family have or ever had any of the following?

- Asthma or respiratory conditions
 Injury from an accident involving a car in the last 5 years
 Overweight or obesity
 Depression & anxiety
 Cancer
 Other serious medical concern? _____

22. Do you feel safe in your neighborhood?

- Yes No I don't know

Comments? _____

23. Do the streets have adequate street lighting in your neighborhood?

- Yes No I don't know

24. Do you think there are too many liquor stores in your neighborhood?

- Yes No I don't know.

25. What activities outside the house do you do with your family? (e.g., take walks)

26. Do you actively participate in the public events and community meetings in your neighborhood?

- Yes No

If no, why not? _____

B. COMMUNITY NEEDS

27. Of these services and programs, which are the 3 you would most like to see more of in your community?

- Health services (e.g., check-ups, immunizations, information on nutrition)
- Childcare
- K-12 education services (tutoring, college prep)
- After school programs (e.g., tutoring, sports, art, and music)
- Continuing education (e.g., GED, ESL, computer, extended learning classes, vocational courses)
- Financial education (e.g., budgeting, using checking and savings accounts, credit counseling, home ownership)
- Employment services (e.g., interview and resume preparation, job search assistance)
- Job training and placement (e.g., apprenticeships)
- Other? _____

28. Do your children experience any specific challenges in school? If yes in what areas?

- Math
- Reading
- Social interaction
- Lack of school materials/supplies
- Over-crowded classrooms

29. What do you think this development project could do to help them?

30. Of these businesses, which are the 3 you would most like to see more of in your community?

- Grocery/produce stores
- Movie theaters
- Healthy and affordable restaurants
- Clothing stores
- Banks
- Pharmacy
- Other? _____

31. Of these Public Services, which are the 3 you would most like to see more of in your community?

- Schools
- Parks and recreational facilities

____ Library

____ Post office

____ Health centers

____ Community center/youth centers/senior centers

____ Other? _____

C. General

32. What is your annual household income?

- Less than \$20,000
- \$20,000-\$31,999
- \$32,000-\$47,999
- \$48,000-\$79,999
- \$80,000 +

33. How many adults live in your household? _____ How many children (<18 years old)? _____

34. How many people living in your household work outside the house? _____

35. How many jobs do you have outside the house? _____

36. How many different families live in your household? _____

If more than one family, is it because you want to or need to?

- Want to
- Need to

37. Do you and your parents live in the same home?

- Yes
- No

If so, would you or they prefer to have their own home if it was within walking distance?

- Yes
- No

38. How many bedrooms are there in your home?

- 1
- 2
- 3
- 4 or more

39. Do you have a separate family or living room as well?

- Yes
- No

40. Do you own or rent your home?

- Own
- Rent

If you rent, what is your current monthly rent? _____

41. At what cross streets do you live?

42. Would like to be contacted with opportunities for involvement in the 29th Street development project or future projects?

Yes No

43. Would you be interested in a construction job or apprenticeship as part of this development?

Yes No

44. If you feel comfortable, please provide your contact information below for ACORN to keep you informed about this project.

Thank you

Name: _____

Address: _____

City Town: _____

Zip/Postal Code: _____

Phone Number: _____