

**Environmental Justice in Lincoln Heights:
An Evaluation of the Cornfield Arroyo Seco Specific Plan**

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Executive Summary

This report reframes the discussion around smart growth and sustainable development by emphasizing the need for an explicit environmental justice objective in planning. Specifically, this report takes a look at Lincoln Heights – a low-income neighborhood in Los Angeles that is disproportionately burdened by the effects of industrial and mobile-source pollution – and it asserts that the City of Los Angeles should take deliberate steps toward improving environmental justice outcomes in that neighborhood. The Cornfield Arroyo Seco Specific Plan, a land use document that establishes a special-use district near Lincoln Heights, is one such opportunity that could potentially turn the smart growth rhetoric of fostering equity and inclusion into environmental justice reality.

Introduction

“What I like to say – and have said – is that environmental justice is our unfinished business.”
– Lisa Jackson, EPA Administrator

On the 40th anniversary of the U.S. Environmental Protection Agency, Administrator Lisa Jackson reflected on the incredible legacy of the agency’s work: the removal of lead from gasoline and the air, increased access to safe drinking water, and the reduction of dangerous air pollution by 50%, among others. Yet in spite of these accomplishments, she noted that a significant challenge remains: the issue of environmental justice continues to be the Agency’s “unfinished business.” These sentiments were echoed across the highest levels of the Obama Administration, which convened the first-ever White House Forum on Environmental Justice last December. The Forum provided a voice to the underrepresented communities across the U.S. that are burdened by the disproportionate effects of air pollution.¹

At the most basic level, environmental justice is a movement that argues everyone deserves equal protection for environmental health and environmental quality. Environmental justice acknowledges that people of color and low-income communities are more likely to live in close proximity to hazardous pollution sites, have less involvement with public decision-making, and be subject to weaker enforcement of environmental laws.

The consequences of environmental *injustice* are tragic. Low-income and minority communities face higher rates of heart disease, cancer, and respiratory illness, three of the deadliest health threats in the U.S. that can be traced to the urban environment – smog, air pollution, and toxics exposure. Recent research indicates that air pollution has a negative impact on classroom learning, diabetes, and asthma; and it disproportionately burdens people of color. Nationwide, 30 million Latinos live in areas where air quality fails to meet national standards. Latino children suffer from the highest rates of leukemia, a cancer linked in part to pesticide chemicals. African Americans are far more likely to live near hazardous waste disposal sites or industrial parks than whites.²

These conditions drive up healthcare costs and hit the uninsured the hardest. They harm marginalized communities in cities across the U.S., hurting schools and driving away investment from businesses. The costs of air pollution alone amount to \$1,250 per resident in Los Angeles.³ Lacking economic opportunities, educational opportunities, and protection from environmental harm, environmental justice communities face inequity and injustice from multiple sources.

Conscious of the issues at hand, government officials, community leaders, academics, and activists are coming together to solve environmental injustice. The federal government has integrated environmental justice criteria into many of its agencies' missions. Environmental justice task forces and collaboratives are present at the state and municipal levels, and community organizations are taking on issues in response to acute local problems.

In Los Angeles County, the environmental justice movement is tackling a host of issues, from protecting the region's poorest communities from its waste systems to reducing industrial pollution from oil refineries, power plants, and intermodal facilities. The deleterious effects of the goods movement industry are being addressed, with communities fighting against freeway expansion and pushing forward innovative policies like the Clean Truck Program in the Ports of Los Angeles and Long Beach. Researchers, policymakers, and community members are actively working to address the cumulative environmental impacts of unregulated toxics and hazards in L.A.'s most overburdened neighborhoods.

In seeking a solution to these "toxic hot spots", the environmental justice community is looking increasingly to land use regulation as a means of improving environmental health outcomes. Researchers are pointing to local planning, zoning, and permitting as important tools that governments already have on hand to address the problem of cumulative environmental impacts. Progressive, community-informed approaches to planning can lead to the development of healthier and more just neighborhoods – places that not only are sited far from toxic hazards but have adequate open green space, innovative urban design, access to transit, economic opportunities, and a vibrant community. Urban planners and environmental justice activists alike are seeing how incorporating sustainability and smart growth into planning pays off in improving environmental health outcomes.

Currently, the Los Angeles Collaborative for Environmental Health and Justice is campaigning for a comprehensive, community-developed policy framework to the City of Los Angeles called “Clean Up Green Up” that would incorporate these planning, zoning, and permitting tools to prevent the further increase of toxic hot spots. The campaign proposes the prevention and mitigation of environmental hazards through these tools as well as strategies for community revitalization that address the crucial needs of employment and investment in Los Angeles’s disproportionately burdened communities. By investing in sustainable economic development and emerging clean technologies, the campaign asserts that these revitalization strategies can result in local growth that goes hand-in-hand with achieving environmental justice.

On a similar level, the Los Angeles Department of City Planning and the Community Redevelopment Agency of Los Angeles (CRA/LA) are in the process of developing a 663-acre “smart growth” Specific Plan (Figure 1) and Redevelopment Plan respectively for the Cornfield Arroyo Seco Plan Area located northeast of downtown Los Angeles within Chinatown, Lincoln Heights, and Cypress Park that could potentially usher in a new era of progressive planning and revitalization to address these issues of incompatible land uses and underinvestment. The Specific Plan and proposed Redevelopment Project Area are singular opportunities to shape the outcome of the Lincoln Heights neighborhood, in particular, for the next decades to come; and they hold the potential for cleaning up environmental hazards, improving the health of its residents, and encouraging economic growth and green jobs.

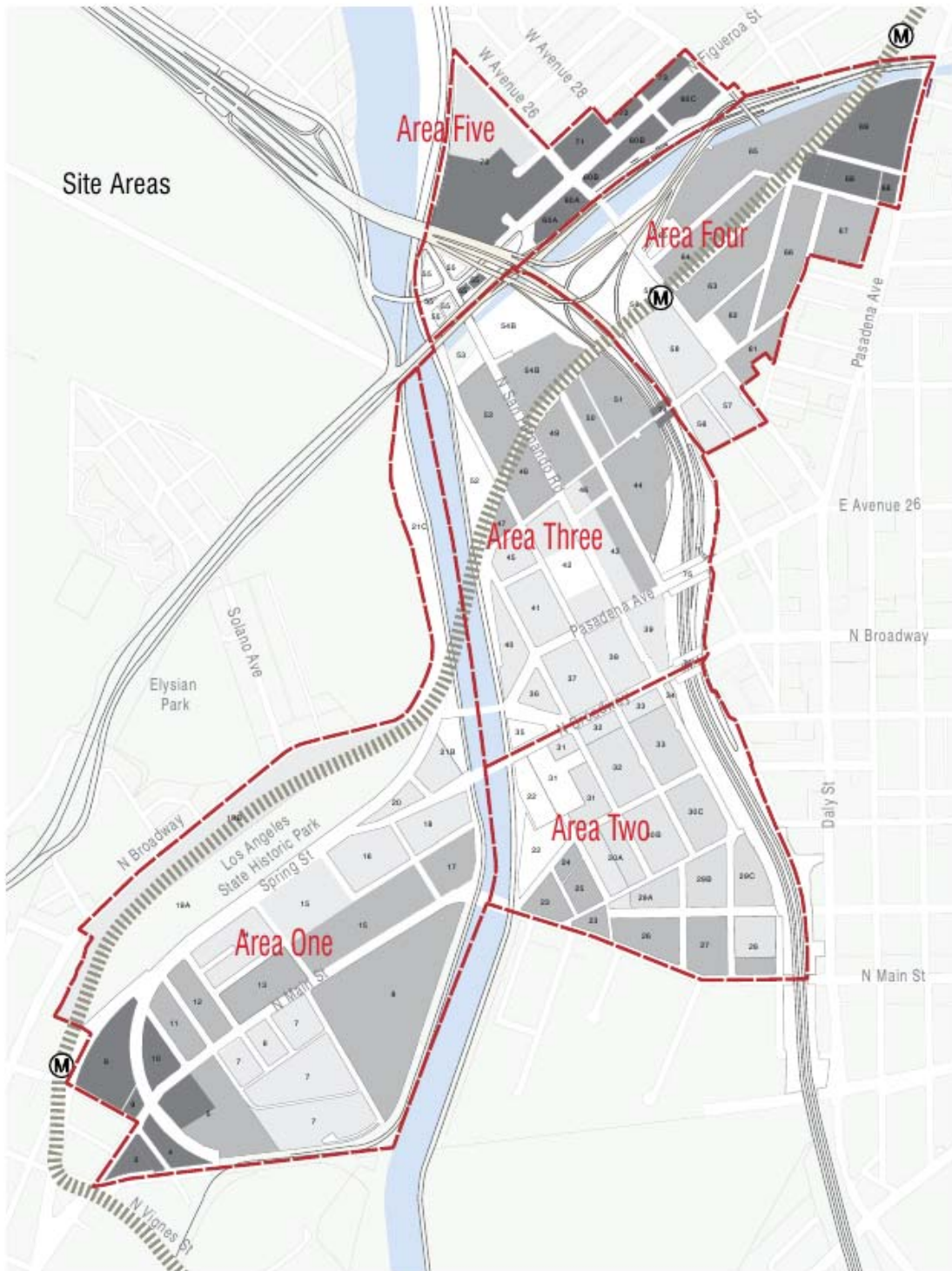


Figure 1: Cornfield Arroyo Seco Specific Plan Area

Environmental Justice in Lincoln Heights: An Evaluation of the Cornfield Arroyo Seco Plan

This report reframes this discussion around smart growth and sustainable development by emphasizing the need to explicitly integrate environmental justice objectives into planning, beyond the presumption that progressive land use policies automatically equate to healthier communities. Specifically, this report looks at the environmental justice situation in Lincoln Heights, and it asserts that, given the preponderance of industrial land uses and major traffic corridors in this predominantly low-income and minority neighborhood, the City of Los Angeles and the CRA/LA have an obligation to take deliberate steps toward improving environmental justice outcomes in the Cornfield Arroyo Seco Plan Area. By rethinking the Specific Plan and proposed Redevelopment Plan in these terms, the agencies will be able to transcend the traditional rift between redevelopment and community-based organizations and turn the smart growth rhetoric of fostering equity and inclusion into environmental justice reality.

Chapter 1 of this report takes a historic look at the nexus between urban planning and public health, and it describes present-day attempts to realign the two disciplines under the framework of environmental justice. A review of literature finds that smart growth does have the potential to improve environmental health outcomes by enabling more physical activity, but questions remain as to how effective smart growth can be in reducing the exposure of overburdened populations to environmental hazards and air pollution. This highlights the importance of an explicit environmental justice agenda in planning, particularly for smart growth infill developments like the Cornfield Arroyo Seco Plan Area.

Chapter 2 profiles the Lincoln Heights neighborhood, and it assesses the present-day environmental justice situation within the Plan Area using an Environmental Justice Screening Methodology (EJSM) developed by researchers from Occidental College, USC, and UC Berkeley. The screening results are verified through a community-based participatory research project called Ground Truthing, in which members from a local youth organization, Southeast Asian Community Alliance (SEACA), collect data on environmental hazards and sensitive land uses within the Plan Area. By employing these observations from community members, who have firsthand knowledge and an understanding of the neighborhood, the chapter utilizes Geographic Information Systems (GIS)

technology to spatially analyze the Plan Area for current land use conflicts. The intent of the chapter is to provide an environmental justice baseline prior to the implementation of the Specific Plan, pointing out challenges for environmental justice as the Plan moves forward. The results of this environmental justice profile can be used to inform the forthcoming Environmental Impact Review (EIR) public review process.

Chapter 3 describes the Cornfield Arroyo Seco Specific Plan in detail, and it assesses the document for its impact on environmental health and justice. This chapter builds on the literature review finding that the built environment can improve environmental health by enabling more physical activity through utilitarian walking, and it assesses two dimensions of sustainability in the Specific Plan – smart growth and urban design – as to how effectively it can encourage this physical activity.

Chapter 4 evaluates the Specific Plan in relation to the “ground truthed” baseline environmental justice profile findings, making a projection as to how overburdened populations will likely be impacted by the Plan in terms of exposure to environmental hazards and air pollution. The chapter performs a spatial analysis of the proposed Specific Plan in relation to current sources of hazards and sensitive receptor sites, identifying potential land use conflicts under the Plan. As discussed in the Chapter 3, the Specific Plan shows environmental justice promise by enabling more community members of different ages and backgrounds to perform routine physical activity, but Chapter 4 chapter reveals that the Plan’s impact on air pollution exposure for overburdened populations is more dubious.

Chapter 5 presents a framework from the community’s perspective – based on observations and conversations with SEACA staff and members – on how the Cornfield Arroyo Seco Project Area should move forward. This section is a call to action for community stakeholders, and it provides recommendations for the City of Los Angeles and the CRA/LA on how they can take steps toward improving the environmental justice situation in the Plan Area.

Chapter 1 / Background

This section reviews literature from the fields of urban planning and public health to build on the case that environmental justice should be an objective of land use planning – particularly for the progressive smart growth planning movement, which lays claim to the idea that certain patterns of development lead to better health outcomes than others. There is already extensive literature on the relationship between the built environment and public health, much of which can be categorized into two distinct camps: one, from urban planners, that focuses on how enlightened land use planning will result in more physically active and therefore healthier communities; and the other, from environmental justice activists, that focuses on how poor land use planning has resulted in disproportionately high rates of illness from exposure to air pollution. However, there are comparatively few examples of studies linking the two disciplines together – that is, studies that factor in the presence of overburdened populations in polluted areas when planning for smart growth or sustainable development. Making this connection is critical because cities cannot effectively plan for a healthy built environment, like what Los Angeles is striving for in the Cornfield Arroyo Seco Plan Area, without taking into consideration the issues of cumulative environmental impacts and inequity.

Roots of the Urban Planning and Public Health Connection: Contagion of Disease

The synergy between urban planning and public health began in the mid-19th century during the Industrial Revolution, though the degree of collaboration between the disciplines has varied since then. In recent years, this connection has regained interest as the link between suburban development patterns and the contemporary health crises of obesity and cancer became evident. Today the Centers for Disease Control and Prevention (CDC) views urban planning in the context of improving health, defining it as a field that “[improves] the welfare of persons and communities by creating more convenient, equitable, healthful, efficient, and attractive places” and addressing such issues as transportation, housing, natural resource utilization, and environmental protection through a “master plan,” which can include, but is not

limited to, a Specific Plan. Urban planning and public health share many of the same goals and perspectives: both strive to improve human well being, focus on the needs of sensitive populations, address complex social systems, and rely on community-based participatory methods.⁴

The two fields have been intertwined for most of their histories, but their synergy grew out of a crisis in the mid-19th century, when the population of large cities in the U.S. and Europe increased exponentially as a consequence of migration to urban areas and rapid industrialization.⁵ Unsanitary industrial cities became home to hundreds of thousands of workers and a haven for disease and epidemics, leading to a marked decrease in life expectancy.⁶ The lack of a sanitary infrastructure and the location of industry within residential areas led to public health crises like tuberculosis and a general accumulation of filth and foul smells.⁷ Poor housing, inadequate ventilation, and dangerous working conditions compounded the problem and caused devastating outbreaks of typhoid fever and cholera.⁸

The goal of preventing further outbreaks emerged out from that period. Urban planning and public health evolved together “as a consequence of late-19th-century efforts to reduce the harmful effects of rapid industrialization and urbanization, particularly infectious diseases.”⁹ Out of that effort was sanitation reform and “legal measures to mitigate the adverse public health impacts of urban development and industrial uses.”¹⁰ The Tenement House Act of 1901 in New York required an increase of light and air in housing developments to combat infectious disease from overcrowding and poor conditions. There were dramatic improvements to public health attributable to changes in the built environment, like sewers and the move of residential areas away from noxious industrial facilities. Urban planners and public health officials worked together in this “era of miasma and contagion”, and municipalities instituted sanitation reforms like garbage collection and rodent control that were influenced by Edwin Chadwick’s groundbreaking “The Sanitary Condition of the Labouring Population” report out of Britain. Planners also used unabashedly the powers of state to separate populations that were suspected of causing disease.¹¹

Beyond making physical changes in the built environment, urban planning and public health began to take on an academic perspective and utilize various analytical tools. In 1854, physician John Snow geographically mapped a cholera outbreak in London, enabling him to identify a public water pump

as the source of the outbreak. Planner Frederick Law Olmsted, who served as President Lincoln's U.S. Sanitary Commission Secretary, fathered the concept that community design relates to physical and mental health; and he went on to design hundreds of places, including New York's Central Park.¹² Two of the seven founders of the American Public Health Association (1872) were urban designers – one was an architect and the other a housing specialist – and housing in the UK became the responsibility of the Ministry of Health.¹³ The synergies of these close knit social disciplines were especially evident in three areas: the promotion of green space for physical wellbeing and mental health, prevention of infectious disease through sanitary infrastructure, and protection from exposure to hazardous industrial pollution.¹⁴

At the turn of the century, public health and urban planning took on the view that concentrating residents in close proximity to businesses and industries was an unhealthy idea, and the earliest zoning ordinances were soon established. These land use laws separated “neighborhoods for residential, business, and industrial uses and specified building heights, setbacks, and the density of use,” and they were “consistently justified because population deconcentration and separation of uses improved ‘public health, safety, morals, [and] general welfare.’”¹⁵ Some planners in the U.S. were particularly inspired by the authoritarian Haussmann model of zoning, which “focused on functionality and a hierarchical ordering of land use that tended to separate residential areas from other land uses, particularly those involving industry.”¹⁶ This segregation of land uses was justified because it isolated functions of the economy that were deemed unhealthy, and zoning served to “immunize” residents from air pollution and other undesirable externalities of the rapidly industrializing economy.¹⁷ The Haussmann model was ultimately reflected in the City Beautiful movement, which replaced many small, human-scaled and mixed-use buildings and streets with large grand-scale buildings and boulevards, as well as in the social agenda of the early 20th-century U.S. housing reform movement,¹⁸ which theorized that the physical disorder and dilapidation of the urban environment determined the moral condition of its inhabitants.¹⁹ Zoning was validated in the 1926 Supreme Court case *Ambler Realty v. Village of Euclid* that, acknowledging the health basis of zoning, granted municipalities the right to control land uses, although in practice the

decision resulted more in a focus on property rights and residential neighborhood values than on its public health roots.²⁰

Through the first half of the 20th century, public health shifted its driving ideology away from urban environmental conditions to germ theory, the idea that microbes were the agents of disease, resulting in an accompanying shift away from planning to epidemiology to improve health outcomes: “Public health research shifted from investigating ways to improve urban infrastructure to laboratory investigations of microbes and interventions focused on specific immunization plans, with physicians, not planners, emerging as the new class of public health professionals.”²¹ The relative successes of zoning and germ theory led to a separation of the public health and urban planning fields, and the resulting uncoordinated efforts to solve contemporary health crises since then have been inadequate in addressing the links between the built environment and disparities facing low-income communities of color.

As the two professions drifted apart, advocacy planning – “the provision of architectural and planning services for vulnerable groups resisting destructive schemes by planning authorities, government agencies, or similar bodies” – began to take place as an outgrowth of the civil rights movement during the 1960s.²² Thirty years prior to the smart growth movement, advocacy planning fought against disparities in the built environment that negatively impacted the environmental health of the nation’s most overburdened populations, and it involved community participation in urban planning and urban design decision-making, “now standard practice by groups like the Urban Land Institute.”²³ Advocacy planning inspired innovations in planning and created community design centers across the country, just as sprawling suburban patterns of development, disinvestment in inner-city neighborhoods, and destructive urban renewal policies were decimating poor communities of color.

Suburban Development: A Modern Health and Equity Challenge

Today, the inequities of the built environment remain, but the biggest health problems facing the United States – particularly its low-income and minority residents – are now diseases that are chronic rather than infectious, as the majority of Americans live in suburban rather than urban or rural areas.

Instead of improving health as zoning was originally intended to do, segregated land use patterns have created new issues of their own. The sprawling nature of suburbia encourages automobile travel, which worsens regional air pollution, and it leads to chronic respiratory ailments and a sedentary lifestyle.²⁴ Fewer adults are walking to work, and even fewer children are walking to school; just 33% of U.S. adults engaged in recommended levels of physical activity in 2002. The results of this inactivity are sobering: heart disease, cancer, cerebrovascular disease, and diabetes are the leading causes of death in the United States, and “physical inactivity and poor diet are now estimated to have caused 400,000 deaths in 2000.” In addition, two-thirds of the U.S. population are either obese or overweight, enough to reach epidemic levels.²⁵

Walking remains the most common form of physical activity for Americans, and a growing number of public health officials are viewing active living – “a way of life that integrates physical activity into daily routines” – as one of the most promising ways to increase physical activity. However, active living requires a built environment that encourages routine walking. Positive community design attributes, such as density, connectivity, and mixed land use, are correlated with higher levels of walking and bicycling for transportation purposes. In spite of the fact that 60% of developers believe there is “a substantial market demand for alternative, mixed-use, pedestrian-friendly development,” relatively little new development is actually designed for pedestrians or bicyclists. Current zoning and land-use regulations and ordinances inhibit the environmental and public health benefits of these pedestrian-friendly developments from becoming reality.²⁶

Traditional zoning has impacted the health of Americans across the spectrum. However, there are clear environmental health disparities and inequities among overburdened populations that are within the capacity of planners to address. Traditional zoning has separated suburban white communities from where people of color and industrial land uses are located, even as highways and major traffic corridors have cut through urban centers, resulting in inner-city neighborhoods that are less walkable and more dangerous to pedestrians. Dense, pedestrian-friendly, human-scaled urban environments that also have low levels of air pollution and toxics are far and few between. As a result, lower income communities are sited

disproportionally close to sources of hazardous pollution than more affluent communities are.²⁷ The burden of illness from the built environment is much greater among minorities,²⁸ as well as the elderly and disabled.²⁹ Poor, immigrant, and minority populations experience “much higher rates of chronic disease, and they are much more likely to live in substandard housing, to be exposed to environmental toxins, and to be victims of unsafe pedestrian facilities.”³⁰

Robert Bullard, an environmental justice pioneer, writes extensively on how traditional patterns of suburban development disproportionately burden people of color: “The politics of metropolitan and regional development, suburbanization, and urban sprawl are intertwined. Both race and class are implicated in white flight, residential segregation, and urban infrastructure decline.” New jobs, areas of housing boom, and economic activity centers tend to follow these patterns of sprawl, which are far from where people of color live. Bullard points out disparities in education, income, housing, transportation, air pollution, lead exposure, lending, and green space that are all attributable to this uneven regional growth. As a consequence of suburbanization, infrastructure investments and social services are spread more thinly than ever before, resulting in poor health outcomes among urban residents and poor environmental quality in urban areas. African-Americans have an asthma-related hospitalization rate three to four times the rate for whites. Eighty percent of Hispanics and sixty-five percent of African Americans live in the 437 nonattainment counties with substandard air quality. According to Bullard, the “urban sprawl problem” is equally a people of color problem.³¹

Howard Frumkin, Dean of Public Health at Washington University and special assistant to the CDC director of Climate Change and Public Health, writes on the health aspects of the built environment and environmental justice. He describes two paradigm shifts that have changed the field of environmental health since Rachel Carson’s day, when she first warned of the effects that pesticides had on health: “One occurred when environmental health encountered civil rights, forming the environmental justice movement. We are in the midst of the second, as environmental health reunites with architecture and urban planning.” Environmental justice and urban planning are now converging, and he identifies five prominent arenas in which the disparities in the built environment are most prevalent: housing,

transportation, food, parks and green spaces, and squalor. Poor people of color disproportionately live in substandard housing, the spatial mismatch of investment and where people of color live “consigns people to ongoing poverty,” poor neighborhoods are less likely to have access to healthy food, members of minority groups tend to lack access to parks and other green spaces, and the poor are disproportionately exposed to “broken windows” – graffiti, litter, and blighted housing – which has been shown to independently predict rates of disease in a neighborhood.³²

Jason Corburn writes that environmental justice can be used as a framework for reconnecting public health and urban planning around a social justice agenda. He stresses the importance of developing an urban health agenda that addresses socioeconomic standing and “other social determinants of health unique to urban areas,” and he advocates for a “new conception of participatory democracy” that involves populations that have historically faced the burden of environmental inequalities yet are frequently excluded from urban design and planning decision-making. The concept of planning for environmental justice continues the tradition of planning for public health, but it addresses the crucial dimension of social equity that historically has been left out from the planning process. Corburn argues that using environmental justice as a democratic framework for future planning will correct the present injustices that result from poor built environment decisions of the past.³³

There are limits to the built environment and public health connection, however, and researchers have identified a couple of areas that require further research. A 2003 *American Journal of Public Health* article notes that “the impact of mediating and moderating factors within the built environment on health must be explored further,” citing the complexity of the built environment and the multitude of other factors than affect public health.³⁴ A 2003 *Journal of Urban Health* article contends that “indicators of the built environment to monitor the health effects of urban planning and policy decisions, especially with regard to land use mix” are lacking.³⁵ Health Impact Assessments and Geographic Information Systems (GIS) hold the potential to improve research methodology, by assessing the relationships between land use mix and disease more systematically, as is implementing “on the ground” community-based participatory research.³⁶³⁷³⁸ Although it is clear that low-income communities and communities of color

are disproportionately burdened by the negative effects of the built environment, planners must remain careful when prescribing solutions that claim to improve public health but may have unintended consequences.

Smart Growth: A Model for Environmental Justice?

Smart growth – the concentration of new growth in compact centers to avoid sprawl and its consequent health effects – and sustainable development – “development that meets present needs without compromising the potential of future generations to meet their needs” – both present opportunities to create healthier and more equitable communities.³⁹ There is extensive literature on how smart growth, for example, can create more walkable communities and enable higher levels of physical activity. But there remain questions as to how effective smart growth can be in reducing the exposure of overburdened populations to environmental hazards and air pollution. While increasing physical activity through utilitarian walking or recreation has been shown to combat obesity, cardiovascular disease, mental health problems, and increased rates of mortality, ideally it should be performed in areas with clean air so as not to increase the risk of lung disease or asthma. This highlights the importance of including a comprehensive environmental justice agenda in planning, particularly for those smart growth sustainable developments that claim to improve environmental health.

Smart growth can positively impact environmental health and justice by enabling more physically active communities, a finding that is detailed in Chapter 3. Smart growth can also represent a reinvestment opportunity in the inner-city and the creation of more local neighborhood amenities, recreational space, and employment opportunities in overburdened communities, as well as a reduction in crime and blight.

A common criticism of smart growth, however, is that it “fails to address issues of social equity, especially the problems facing the poor.”⁴⁰ Bullard writes that, for many environmentalists and private developers, smart growth and sustainable development “mean a blending of environmental and private real estate goals,” but “they do not, however, include social justice or racial equity.”⁴¹ The poor and

people of color do not necessarily benefit from these environmental and private development objectives, as they are often left out from shaping these goals. As a consequence, smart growth often means gentrification and displacement for low-income residents who are priced out of their existing neighborhoods. Smart growth can represent a real threat to the well-being of the poor.

Furthermore, there is limited research on the health impacts of smart growth on overburdened populations; there is a real possibility that smart growth can lead to higher exposures to air pollution among poor communities of color. People of color already live in denser, more polluted areas, and they already walk and use transit more. Concentrating new growth in these areas, while reducing total vehicle miles traveled (VMT) and sprawl, may not necessarily result in better air quality at the local neighborhood level. A recent study by researchers from Vancouver, B.C., found that dense, walkable communities tend to be lower income; have higher nitric oxide (NO) concentrations, a marker for direct vehicle emissions; and lower ozone (O3) concentrations, a regional secondary pollutant, than lower density, higher income, less walkable neighborhoods.⁴² The ideal “sweet-spot” neighborhoods in the study with both low levels of NO and O3 tended to be highly walkable, higher income areas concentrated near but not at the city center, reflecting the complexities of built environment and health relationships. In a report prepared for the LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development) Core Committee, Patrick et al. notes:

... the ability to demonstrate that people that live in more mixed, compact, interconnected environments pollute less than others in more sprawling settings does not constitute a sure bet for improved respiratory health. While regional air quality benefits in the form of less ground level ozone may be a reasonable claim, localized exposure to harmful air toxins and particulates in these more walkable environments presents other health concerns.⁴³

Land use and zoning greatly determines the location and quantity of such exposure to pollution.⁴⁴ There is also research in progress on how roadway areas for infill development could exacerbate exposure to pollution for sensitive populations,⁴⁵ and the Bay Area Air Quality Management District (BAAQMD) set buffer recommendations for new homes that some developers perceive as conflicting with transit-oriented smart growth.⁴⁶ Yet among all the American Planning Association topics of organizational policy or recommendations, none of them directly address the issue of local air quality or health impacts.⁴⁷ Zoning

and planning should therefore be “reformed to reunite it with its public health roots,”⁴⁸ which can be accomplished through the tools of zoning, taxation, and spending.⁴⁹ Perdue, et al. suggest that smart growth can be used as a framework for improving environmental justice if it involves the following recommendations and principles from public health: Bring data to the table, as “public health scientists bring unique training in epidemiology and empirical analysis” beyond that of urban planners’ instincts; promote healthy activities particularly for children and teenagers; be a voice for underrepresented populations and minorities; and encourage government to lead by example, not just by regulation.⁵⁰

Moving Forward

The literature suggests that redeveloping inner cities should have a corrective justice effect and directly benefit the marginalized communities that have suffered from years of disinvestment attributable to patterns of suburban development. As an alternative to traditional sprawl, smart growth should not further perpetuate these injustices by displacing these residents from the neighborhoods where reinvestments are made, or by further exposing these populations to higher concentrations of pollution. Planners need to be sensitive to how smart growth in urban areas affects overburdened populations, both in terms of exposure to air quality and gentrification.

Chapter 2 / Environmental Justice Profile of the Plan Area

This report was conducted in collaboration with the Southeast Asian Community Alliance (SEACA), a Los Angeles youth-based organization that supports the development of its members – who hail from Chinatown, Lincoln Heights, and Solano Canyon – “to create new and culturally relevant solutions to deep-rooted social, economic, and racial justice issues impacting the Southeast Asian Community.”⁵¹ SEACA is currently developing a campaign around the Cornfield Arroyo Seco Specific Plan, with the objective of engaging its youth members in the research of the Plan. The organization has formed three research teams, each led by a staff member, to study the effects of the Plan with regard to affordable housing, employment, and environmental justice. This report contributes to SEACA’s environmental justice research on the Plan – as well as that regarding Lincoln Heights, the neighborhood in which the majority of SEACA members reside. To this date, there has not been an assessment of environmental justice in Lincoln Heights, despite the many indicators that suggest it is disproportionately impacted by the effects of industrial and mobile-source pollution.

Among the three neighborhoods that SEACA works with, Lincoln Heights is likely to experience the greatest change from the Specific Plan and Project Area, as Chinatown has been a Redevelopment Project Area since 1980, and Solano Canyon is a purely residential neighborhood that will not see redevelopment. The majority of the Plan Area falls within Lincoln Heights in terms of both area and population size. Even new redevelopment on the Chinatown side of the Los Angeles River – the area consisting of the “Cornfields” State Historic Park and the industrial area opposite from it – will likely take on more characteristics of Lincoln Heights in that the Specific Plan does not have the explicit cultural branding of Chinatown, assuming it does not become a self-contained enclave of gentrifiers.

Still, from the perspective of SEACA members, the two neighborhoods are very much interconnected. The western side of Lincoln Heights experiences a spillover effect from Chinatown, as many residents travel between the two neighborhoods for school, work, dining, shopping, recreation, and community events. A local MTA bus route line 45 circles the two neighborhoods frequently, and both are

connected by the Metro Gold Line – though the cost is too prohibitive for many residents to use over such a short distance. In part because of its proximity to Chinatown, the percentage of Asians living in Lincoln Heights is high for Los Angeles at 25.2%, and 16.9% of its foreign-born residents hail from Vietnam. However, the vast majority of Lincoln Heights residents, particularly as one goes east from Chinatown, is Latino at 70.7%, the prevalent community that SEACA readily acknowledges it does not reach out to enough.⁵²

This study also focuses on Lincoln Heights because it lacks the same tradition of community activism and civic participation as some other communities in Los Angeles with similar socioeconomic characteristics such as, for example, Boyle Heights, its neighbor to the south. SEACA attributes this lack of community organizing to the extensive language capacity that is needed but lacking – community members speak Spanish, Cambodian, Laos, Vietnamese, Thai, and Cantonese in the Plan Area – and hence their focus on English-speaking youth members. There are a few other youth-based organizations, such as the Lincoln Heights Youth Association and the Los Angeles Boys & Girls Club, but there are no organizations that organize communities in Lincoln Heights and none that tackle the problem of environmental injustice. The churches in Lincoln Heights either have a small neighborhood presence, or it is the Young Nak mega-church that predominantly serves an outside community of Korean Americans.

In the context of the Cornfield Arroyo Seco Specific Plan, this lack of social capital among the Lincoln Heights community presents a problem. The stakeholders that are playing an active role in shaping the Plan are already in positions of power and influence – these are the property owners, the Chamber of Commerce, the Business Improvement District, and the mega-church – or they view the Specific Plan from a regional perspective, like Friends of the Los Angeles River and “creek freak” Joe Linton do. This report acknowledges the lack of immediate grassroots organizing capacity in the community to provide a community-based alternative plan. Instead, by drawing attention to the environmental justice situation in Lincoln Heights and working within the framework of the Specific Plan, this report serves more to emphasize to the Department of City Planning and CRA/LA the need to carefully consider environmental health and justice outcomes in the Plan Area, and suggest simple policy

changes that would have a positive impact, as well as to draw attention from the broader environmental and environmental justice community to Lincoln Heights's current situation. The fact the Plan has a Community Advisory Committee, as required by law; a seemingly open-to-suggestions Department of City Planning; and a CRA/LA that wants the goodwill of the community presents an opportunity for this approach.

Although this research was conducted with SEACA, which represents only a fraction of residents from Lincoln Heights, the following environmental justice profile is applicable to all those living in or near the Plan Area.

Lincoln Heights Neighborhood Profile

Lincoln Heights is located within Los Angeles Council District 1 and is represented by Councilmember Ed Reyes. According to 2008 estimates from the Los Angeles Department of City Planning, the neighborhood has a population of 29,637.⁵³ From observations of the neighborhood and conversations with residents, this report found that the Lincoln Heights community presently faces a number of challenges: a lack of attention from elected officials for the plight of low-income residents in the neighborhood and the lack of incentives for civic participation in the greater Lincoln Heights community, both of which make community-based development difficult. The median household income in Lincoln Heights was \$30,578 in 2008, low for the City of Los Angeles.⁵⁴ Many of the challenges facing the environment are related to the built environment – a blighted environment that poses a challenge for safety, health, community, and prosperity – as well as more inherent underlying issues like crime, poverty, and lack of social capital. Lincoln Heights residents perceive a lack of linkages to the rest of the greater Los Angeles region, isolated and left to themselves in their own low-income, primarily industrial neighborhood. Community building – and establishing “sticky” community assets – is difficult in an environment where people, cars, and capital flow through, leaving just as easily as they come.

Transportation infrastructure blight dominates much of the Plan Area landscape in Lincoln Heights. The Interstate 5 freeway cuts north-south through the Plan Area, casting an imposing shadow

over the community and serving as a canvas for low-grade graffiti. Its mega-scaled structures of overpasses, connectors, bridges, and on- and off-ramps create obstacles to reasonable pedestrian and bicycle travel. Parks and recreation areas, including the recently opened Arroyo Seco-Los Angeles River Confluence Plaza, unexplainably share the landscape with these concrete structures; and broken sidewalks, cracked roads, construction barricades, and “keep out” signs create an imposing environment for pedestrians. The Arroyo Seco parkway parallels the Arroyo Seco stream in the northeastern portion of the Plan Area, and its massively scaled interchanges are the visual center of the area. Broadway, Avenue 26, Pasadena Avenue, and Figueroa Street are major traffic corridors that experience much of the spillage, the flood of cars and trucks that are dumped off into the neighborhood to service warehouses in the area. Metrolink railroad tracks parallel the western and eastern sides of the River; immediately adjacent are series of large electricity transmission lines that the City duly notes are “visual and physical obstacles to the future revitalization of the Los Angeles River.”⁵⁵

There are many examples of incompatible land uses in the Plan Area, with warehouses sited next to houses the most egregious (Figure 2). The Plan Area is parking lot central – there are lots for scrap cars, lots for municipal vehicles and machinery, lots for City employees, lots where buses and semi-trailer trucks park, lots where buses are refilled with fossil fuels, and lots where impounded cars sit (Figure 3). Auto repair facilities prominently feature piles of crushed car bodies that sit there indefinitely (Figure 4); and major yards and plots of land are marked by barbed wire, gates, security booths, no trespassing signs, corrugated metal siding, peeling paint, litter, and broken windows. Toward the evening, the area takes on an eerie atmosphere, as masters of industry and trade pull into warehouses in their tinted Mercedes S-classes, just as workers shuffle out in groups into white vans and rusted pick-up trucks, after spending the day sewing together “Far East Fashions” and worker uniforms.

The places of residence are similarly compelling places, even independent of the prominent industries next door. Lincoln Heights is one of the oldest neighborhoods in Los Angeles, and there many old Victorian homes and Craftsman style bungalows with porches and small gardens in the front, most of which have been updated with security bars and metal gates. Within the Plan Area, there are an estimated

1,814 households, and renters account for 82.5 percent of that population.⁵⁶ Many of the houses have been converted into multi-family residences – and families are larger than the City average here, at 4.03 persons per family and 3.6 persons per household.⁵⁷ Roman Catholic memorabilia can be seen hanging from windows next to homes accented with lanterns, stone dragon carvings, and incense candles. The 2000 census found that 60 percent of the population in the Plan Area speaks Spanish at home, 30 percent speak an Asian language at home, and 10 percent speak only English; 55.8 percent of residents in Lincoln Heights are foreign born.⁵⁸ All cultures, however, are noted for their affinity of cacti plants in pots; and wind chimes and the sound of dogs barking add to the pedestrian experience, as do the token toilet and refrigerator and sagging couch left on the sidewalk for eventual collection.

The larger commercial corridors also reflect the character of the neighborhood. Makeshift taco tents roast spits of *al pastor* pork basting from the juices of a pineapple on the quiet Humboldt side street off the busy Avenue 26 corridor, providing respite to nearby workers in the warehouses and customers from the affordable housing complex. This indicates a degree of street life, in spite of the inhospitable flow of traffic, the four gas stations on each corner of the Figueroa Street and Avenue 26 intersection, and the car-oriented fast food restaurants, as local community members try to serve a demand not supplied by present land uses. It is evident the difficulty that people are having with the streets; elderly people struggle as they try to cross intersections in time with bagfuls of groceries, and people stand directly underneath the sun breathing in pollution from cars streaming past while waiting for the bus – bus shelters are non-existent. The area exemplifies heavy transit use and high levels of pedestrianism, even without the necessary street design to make this reality pleasant or safe; and it demonstrates a need for traffic calming, trees, and bike lanes. In spite of the blight and heavy traffic rushing past, residents in Lincoln Heights still manage to do it.



Figure 2: A children crossing sign and a forklift crossing sign sharing Mozart St.



Figure 3: Excel Charter Academy on Darwin Ave. next to a truck lot



Figure 4: House on Darwin Ave. next to a scrap yard

Children are prevalent in the Plan Area, seen at the many public and private schools that serve the area, the childcare centers, and the parks. The median age is 27, young for the city, and 48 percent of children under the ages of 18 live in poverty. 45 percent of the population in the Plan Area had received less than a high school education.⁵⁹

This report recognizes the multitude of challenges presently facing the Lincoln Heights community, but it will focus on environmental justice – specifically, the idea there should be equitable access to a walkable community with clean air. The environmental approach is often viewed as the most feasible means of changing or influencing a plan or development, as environmental arguments are the most compelling arguments in an Environmental Impact Report (EIR).⁶⁰

Clean Up, Green Up

This report builds on existing research around the cumulative environmental impacts facing overburdened communities in Los Angeles. There have been a number of studies that assess the multiple dimensions of environmental injustice facing L.A.’s neighborhoods. *Building a Regional Voice for*

Environmental Justice by the Los Angeles Collaborative for Environmental Health and Justice analyzes the demographic patterns of emissions with regulatory data and Geographic Information Systems (GIS) technology to document “the clear relationship between toxic exposure and race and income status, providing scientific evidence to corroborate residents’ first-hand knowledge that they were disproportionately impacted by air pollution from such sources as chemically-intensive manufacturing and fossil fuel-based transportation modes.”⁶¹ The Collaborative released a follow-up document in January 2011 titled *Hidden Hazards* that builds on their past findings on air pollution, by incorporating community-based participatory research methods that “incorporate community knowledge into research design” and first-hand data collection.⁶² The environmental justice profile (“Ground Truthing”) of the Specific Plan Area that follows is based on the methods presented in that document. *Hidden Hazards* is also the supporting document that was released together with the *Clean Up Green Up* campaign.

Clean Up Green Up, sponsored by Coalition for a Safe Environment, Communities for a Better Environment, Pacoima Beautiful, and Union de Vecinos, is a proposed demonstration effort that would use planning tools that municipal governments have on hand, including the Specific Plan, to begin addressing some of the environmental hazards in Los Angeles’s most overburdened communities. It advocates for the creation of special districts – Green Zones that “use permitting, tax and utility rebates, and economic incentives to prevent new sources of pollution, begin to reduce existing pollution, and transform the demonstration neighborhoods [of Boyle Heights, South Los Angeles, and Pacoima] by attracting new green businesses and helping existing businesses upgrade and continue to provide jobs.”⁶³

This report on the Cornfield Arroyo Seco Specific Plan and proposed Project Area runs parallel to the *Clean Up Green Up* campaign in that both advocate for cleaning up the environment through better land use planning and for building community through reinvestment in green economic opportunities, new open green space, and environmental mitigation. *Clean Up Green Up* shares several goals with the proposed Project Area; it advocates for financial and planning incentives, design standards to mitigate the impacts of bad land uses, as well as inspection and enforcement protocols and an administrative funding mechanism to see the policy through. While *Clean Up Green Up* originates from community

organizations, and the Cornfield Arroyo Seco Specific Plan is a proposed ordinance by government in response to local problems, both should have common objectives. The Plan Area can be yet another example of a documented environmental justice community in need of revitalization. In many ways, *Clean Up Green Up* is like the proposed Cornfield Arroyo Seco Redevelopment Plan but with an explicit environmental justice and community-based focus, precisely what this report suggests.

A Motion was introduced January 2011 by Los Angeles Councilmember Jose Huizar that called for city agencies – including the Department of City Planning and the CRA/LA – to look into the feasibility of implementing these *Clean Up Green Up* land use tools, regulations, and reinvestment strategies. Should the Motion pass, this report gives the agencies a head start by providing an environmental justice profile of a Plan Area they are working on, as well an example of how the agencies can implement one of the *Clean Up Green Up* policy recommendations, the use of a Specific Plan, for environmental health and justice.

Ground Truthing Lincoln Heights: An Environmental Justice Profile of the Plan Area

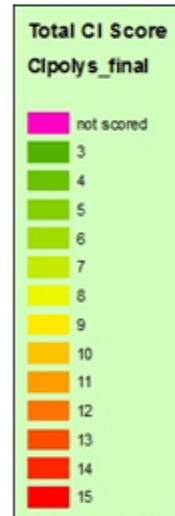
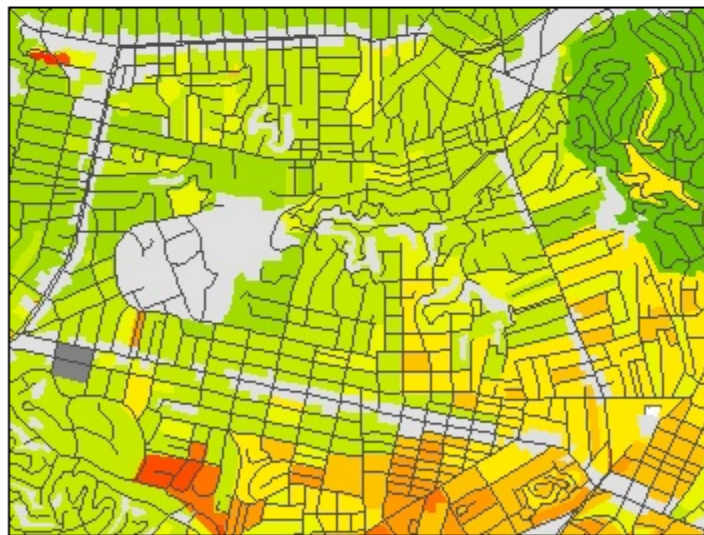
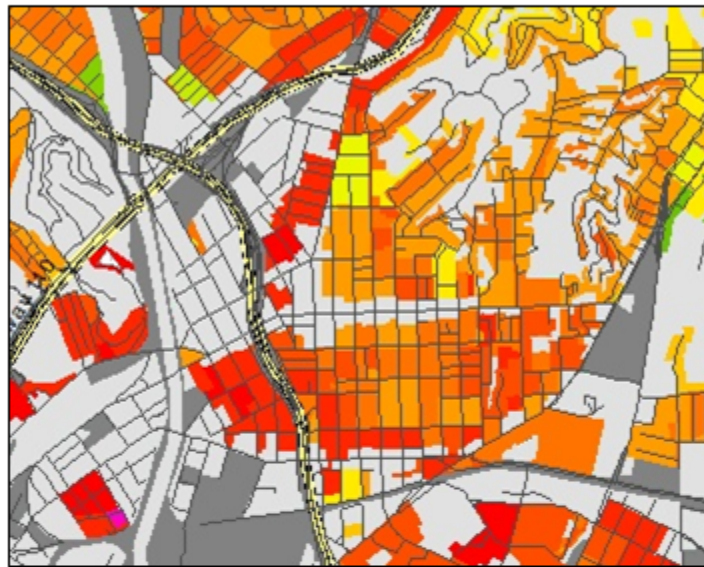
Cinderby notes that participatory GIS (P-GIS) research methods can serve as an important tool in the context of planning and development: “While there is a real possibility that new infrastructure will create isolated enclaves of affluence ... [giving] physical expression to urban inequalities, [P-GIS projects] help by assessing local concerns, knowledge, and design ideas into the urban development process,” ultimately overcoming barriers to engagement for hard-to-reach groups.⁶⁴ In this report, participatory GIS builds on the expertise and knowledge that SEACA youth members have of their own community. The members provided insights as to where clusters of pollution were located and already had ideas as to where sensitive populations were concentrated. P-GIS projects are an opportunity for community members to be more involved in understanding the planning processes that shape their neighborhood.

Background

The Cornfield Arroyo Seco Plan Area currently has a number of land uses that SEACA members perceive as incompatible. Residential areas, parks, and other sensitive land uses are in close proximity to industrial zoning, major traffic corridors, and other potential sources of air pollution. Initial screening with an Environmental Justice Screening Methodology (EJSM) developed by researchers from Occidental College, USC, and UC Berkeley suggests that the Plan Area has the characteristics of an environmental justice community, with high cumulative impact (CI) scores across the area. Figure 5 compares the EJSM scores of the Plan Area with that of the Eagle Rock neighborhood in Los Angeles; red indicates a high score while green indicates a low score.

EJSM was developed under research contract with the California Air Resources Board (CARB) and the California Energy Commission to study indicators of cumulative environmental impact that “reflect research on air pollution, environmental justice, and health” and are “reviewed by community environmental justice groups, CARB, academic peers and other agencies.” EJSM specifically looks at three indicators – (1) the proximity of sensitive land uses to hazards, (2) health risk and exposure, based on modeling from emissions inventories, and (3) social and health vulnerability – and the aggregate of those indicators is the resulting CI score. The methodology can be used to inform local land use planning, regulatory decision-making and enforcement, and community outreach. For the purposes of this report, EJSM was used to confirm initial community suspicions that the Plan Area is indicative of an environmental justice community, and it warranted the need for further research and assessment – i.e., Ground Truthing.⁶⁵

Environmental Justice Screening Method (EJSM) Total Cumulative Impact (CI) Score



Top: Cornfield Arroyo Seco Specific Plan Area
Bottom: Occidental College in Eagle Rock, Los Angeles

Source: James Sadd, Ph.D. February 10, 2011

Figure 5: EJSM results comparison – Plan Area and Occidental College

Ground Truthing, a community-based participatory research project designed by partners of the Collaborative for Environmental Health and Justice, adds a greater level of accuracy and detail to EJSM findings by employing the expertise of community members to verify and add to the existing database of sensitive receptors and hazards used in calculating an EJSM score. Ground Truthing provides a clearer picture of the cumulative environmental impacts of air pollution on the Plan Area, and it builds the case for environmental justice action in Lincoln Heights.

Methods

Ground Truthing of the Cornfield Arroyo Seco Plan Area is based on a January 2011 training with the California Environmental Justice Alliance (CEJA) in Oakland, CA, led by James Sadd, Ph.D., Professor of Environmental Science at Occidental College. Materials from the workshop were adapted to suit the specific circumstances of the Plan Area, but the methodology is largely identical. Beginning in February 2011, SEACA members were given a presentation on the objectives of Ground Truthing, which supplemented the environmental justice unit that SEACA's Youth Organizers (YO) were studying at the time, and members were trained on how to perform data collection. By March 2011, members were going out in teams of two with clipboards of map printouts of the Plan Area and data entry sheets, used to record locations of the hazards and sensitive receptors they came across. Two sessions in total were conducted in collaboration with SEACA members, with four remaining follow-up sessions that occurred through April 2011, which utilized a mobile phone application to geo-code photos of hazards and sensitive receptors taken during data collection. The coordinates of the sites were determined with Google Earth. Each of the sensitive receptor and hazard points were then mapped using ArcGIS software, as were residential land uses and freeways.

Community members first verified, or "ground truthed," the locations of official sensitive receptors in the Plan Area, defined by the California Air Resources Board (CARB) as "those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality)." Official sensitive land uses include schools, parks and

playgrounds, child care facilities, health care facilities, senior housing, and residential communities.

Participants then ground truthed the locations of official air quality hazards in State regulatory agency databases and land use maps: Department of Toxic Substances Control (DTSC) sites, Community Health Air Pollution Information System (CHAPIS) point facilities, chrome plating facilities, intermodal facilities, and major streets and highways. Community members also agreed upon a list of air quality hazard and sensitive receptor categories of concern that they would identify in the Plan Area – in addition to officially recognized hazards and receptors – which are summarized in Figure 6. Ground Truthing verified official sources, the basis of EJSM, and added to that database community-identified concerns in the Plan Area.⁶⁶

Air Quality Hazards

Type	Number
Auto Paint	2
Auto Repair	5
Dry Cleaning	1
DTSC Facility	6
Fuel Refill	7
Manufacturing	6
Power Facility	1
Recycling/Waste Center	1
Scrap Yard	5
Truck Yard	6
Warehouse (with visible truck traffic)	5

Sensitive Receptors

Type	Number
Arts	1
Childcare	4
Church	9
Neighborhood Org.	1
Park	6
Residential (not zoned)	13
School	6

Figure 6: Community Findings – Air Quality Hazards and Sensitive Receptors within Plan Area

An ArcGIS Buffer Tool was applied using the health protective guidelines established in the CARB “Air Quality and Land Use Handbook” to identify areas with incompatible land uses. CARB advises against siting sensitive land uses within 500 feet of a freeway, citing scientific evidence on how

carcinogenic diesel particulate matter and other mobile-source pollutants disperse. Studies have shown adverse health effects, primarily reduced lung function and asthma hospitalizations, associated with proximity to freeways. A Southern California study showed that concentrations of particulate matter “decreased dramatically within approximately 300 feet of the 710 and 405 freeways,” while another study observed a 70 percent drop in traffic related pollutants at 500 feet from a major freeway. Appendix A provides an overview of CARB buffer recommendations for each official hazard in greater detail.⁶⁷

Findings

By applying these buffer recommendations to a map of air quality hazards and sensitive receptors in the Plan Area, this report finds that there are significant violations of these buffers, confirming the presence of many incompatible land uses (Figure 7). Sensitive land uses like parks, schools, and churches are presently sited too close to sources of toxic hazards and air pollution. The 500-foot freeway buffer is especially dominant on the map, overlapping 14 sensitive receptors that were identified by the community, as well as several blocks of residentially zoned land.

This report also finds there are more air pollution hazards than officially recognized in DTSC and CHAPIS databases. Ground Truthing participants identified an additional 45 hazards that they perceived were of environmental concern. Similarly, there are many more sensitive land use types than officially recognized by CARB like churches, as well as residential uses that are zoned for industry and manufacturing.

GIS analysis and community observations also located specific clusters of land use incompatibility. For example, in Area Two of the Specific Plan, a park, school, church, and multiple residences are all located in close proximity to a truck manufacturing corridor with spray paint booths, as well as scrap yards, a carpet mill, and Amtrak train crossings. An industrial area across from Main Street, just outside Area Two, contains a Cemex cement manufacturing facility, a UPS trucking terminal, and an intermodal rail yard facility that contribute to heavy truck traffic and pollution.

Cornfield Arroyo Seco Specific Plan Ground Truthing Area

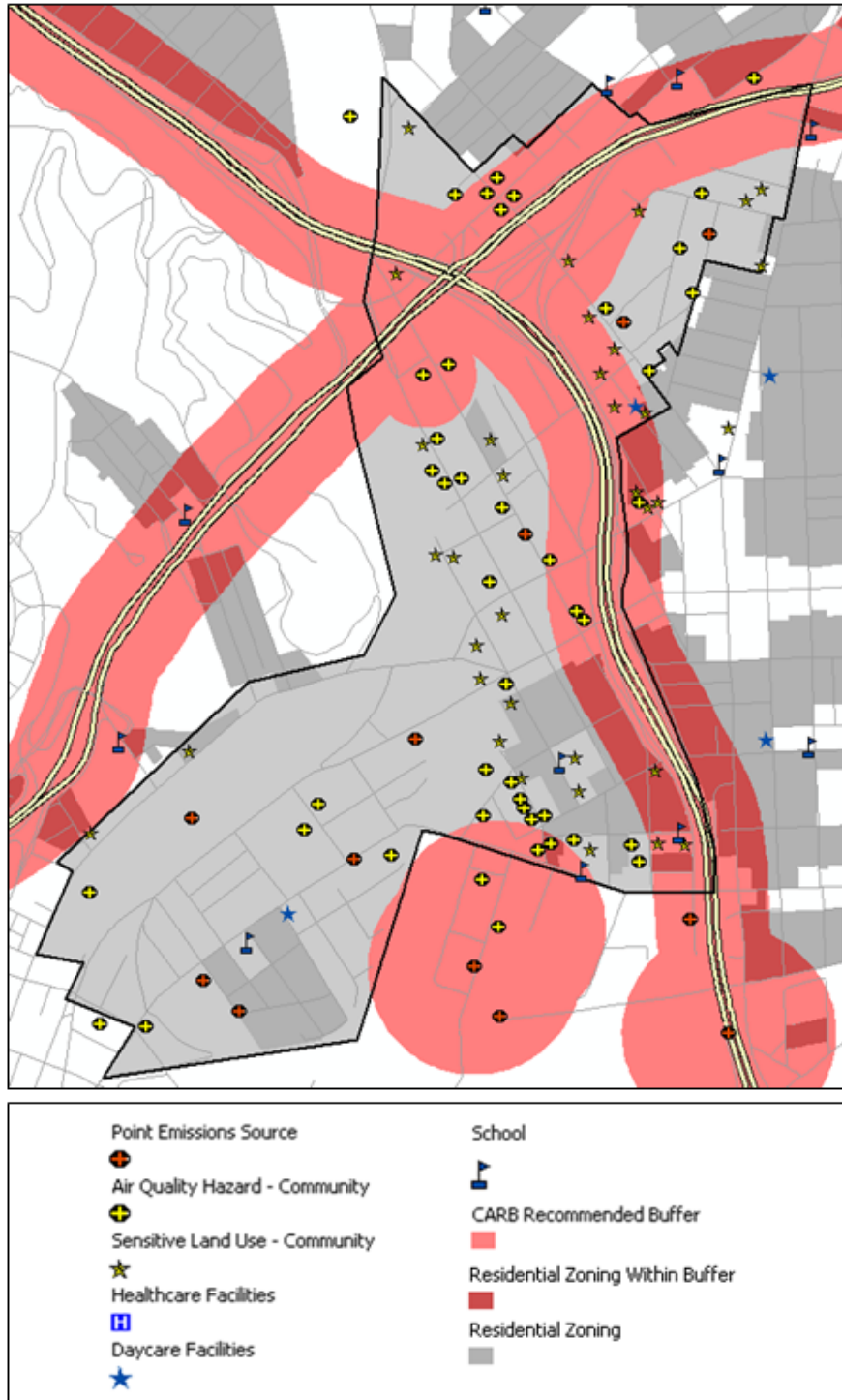


Figure 7: Numerous sensitive receptors are located too close to hazards



Figure 8: Satellite view of Area Two of the Specific Plan

Limitations

The participants encountered two difficulties in the research process that can be addressed in future projects or studies: (1) it was difficult to distinguish between land uses that are truly hazardous and those that are only perceived to be hazardous, and (2) the Ground Truthing teams did not record warehouses in Area One of the Plan because there was no visible truck traffic at the time of data collection, even though there could have been truck traffic during other hours of the day.

Conclusion

Initial research suggests that the Plan Area has many attributes of an environmental justice community. Demographic data and neighborhood observations indicate a high level of social vulnerability within the Plan Area, while Environmental Justice Screening finds there are a multitude of officially-recognized environmental hazards. Ground Truthing and GIS spatial analysis highlight current incompatible land uses and present a compelling case for further environmental justice assessment and action. These findings suggest that the Los Angeles Department of City Planning must take caution to ensure that the Cornfield Arroyo Seco Specific Plan does not negatively impact the environmental health of the overburdened communities that live within the Plan Area.

Chapter 3 / An Opportunity: The Specific Plan

This chapter assesses the Cornfield Arroyo Seco Specific Plan (CASP) for its impact on environmental health and justice. This chapter builds on the idea that effective land use planning can improve environmental health by enabling more physical activity through utilitarian walking or active recreation, and it assesses two dimensions of sustainability in the Specific Plan – smart growth and urban design – as to how effectively it can encourage physical activity. The next chapter focuses more on local air quality, another element of environmental health.

This analysis will be informed by LEED-ND 2009 rating criteria, New York City Active Design Guidelines, *Health and Community Design: The Impact of the Built Environment on Physical Activity* by Lawrence Frank, and *Urban Sprawl and Public Health: Designing, Planning, and Building for Health Communities* by Howard Frumkin, as well as observations made while Ground Truthing with community members in the area.

Description

The Cornfield Arroyo Seco Specific Plan is a comprehensive land use document that guides future growth in the Plan Area by establishing new zoning districts that enable a mix of uses, urban design standards that promote a more livable environment, and permanently accessible green spaces that provide much needed recreation and public space for residents. The impetus for the Plan arose from recent infrastructure projects, namely the completion of new Gold Line Metro stations and the Los Angeles State Historic Park, that have increased development interest in the Area and led to piecemeal “project by project” zoning changes as large plots of industrial land were targeted for loft conversion, artist galleries, and other new uses. The intent of the Plan, therefore, is to develop a smart growth roadmap to prevent “a haphazard and fractured neighborhood that ignores the needs and concerns of the community” and to preserve valuable industrial land needed for the growing clean technology sector.⁶⁸

The Specific Plan includes multiple goals identified by the Department of City Planning after conducting community outreach: livability, social equity, environmental protection, and economic development and efficiency. Planners set an objective to preserve cultural and land use diversity, increase access to transit, provide open space and active recreation, protect existing jobs, and develop more retail and entertainment amenities. For residents in the Area, the Plan presents a singular opportunity to shape the neighborhood for the next decades to come.⁶⁹

The Plan builds upon the history of Los Angeles; the City was founded on the northwestern corner of the Plan Area at the confluence of the Arroyo Seco and Los Angeles River. The Cornfields site, home to the Los Angeles State Historic Park, was once the City's original rail depot and terminus for many immigrants arriving in the early twentieth century. The area is now viewed as an "Opportunity Area" in the Los Angeles River Revitalization Master Plan.⁷⁰

The Plan was designed with many principles of smart growth, urbanism, green building, and sustainable development in mind. The Plan is the only public project "to promote the healthy living benefits of the LEED-ND (Leadership in Energy and Environmental Design Neighborhood Development) concept and to demonstrate a leadership role that government can play in supporting sustainable land use and development practices."⁷¹ Because of changes in LEED-ND evaluation criteria, however, the Specific Plan does not go beyond Certification; at 663-acres, the size of the Plan exceeds the limits set by the U.S. Green Building Council (USGBC), and as a Specific Plan, the area will not realistically see a build-out within five years.⁷² Still, the Specific Plan is heavily influenced and informed by LEED-ND design standards, and it represents a progressive approach to planning that could improve environmental justice in Lincoln Heights.

After nearly four years – the first public scoping meeting occurred in September 2007 – the draft Plan is in its final stages of development nearing completion. There had been several delays with the project; the Environmental Impact Report (EIR) was delayed for a year when the Community Redevelopment Agency of Los Angeles (CRA/LA) became involved and established a Preliminary Plan to create a Redevelopment Plan for a proposed Project Area. A Redevelopment Plan would be the vehicle

by which the Specific Plan could be implemented, but the recent State budget crisis has put redevelopment on hold, and at the moment, the future of the Redevelopment Plan is uncertain.⁷³ The draft programmatic EIR is expected to be released May 2011 and the City Council is expected to vote on the Specific Plan late 2011.

Smart Growth

Smart growth concentrates new population growth in compact centers to avoid sprawl and its negative health effects. The Cornfield Arroyo Seco Specific Plan (CASP) is an example of smart growth in that it will permit up to 7,000 new households in a previously developed industrial area just northeast of downtown Los Angeles⁷⁴, and it provides for a mix of uses that encourages dense, compact development.

Smart Location

The proper siting of new growth is important for sustainable and equitable development because it prevents the urban sprawl commonly associated with suburban development. By preventing the footprint of new development from expanding beyond currently developed land, smart locations save on infrastructure costs and protect virgin land and natural resources from development.⁷⁵ CASP exemplifies smart location: sited on an already developed infill site, the Plan Area is served by existing water and wastewater infrastructure, minimizing the economic and environmental costs of creating new pipes and sewers. The USGBC awarded the Plan a full 8 points out of 8 for smart location under LEED-ND evaluation criteria.⁷⁶

Proper siting of growth has important public health implications as well. A recent study compared county sprawl indexes with the health characteristics of individuals, and it found that people living in sprawling counties are likely to have a higher body mass index (BMI), a metric for obesity, than those living in compact counties. A 50-point increase in the sprawl index was associated with a one pound weight gain for an average person, and the most sprawling of places weighed on average six pounds more

than the most compact county. As an example of infill development, CASP concentrates population growth in a relatively dense, developed area proximate to sources of employment. In contrast to siting growth in the Inland Empire or other such sprawling areas, the southern top of CASP is within a mile of downtown Los Angeles, a major employment center, allowing residents to live close to where they work, reduce vehicle miles traveled, improve regional air quality, and increase the healthful physical activity associated with walking. Encouraging development within existing cities reduces the “adverse environmental and public health effects associated with sprawl.”⁷⁷

Siting new growth in areas proximate to community amenities like shopping, grocery, and entertainment also plays an important role in improving public health, by reducing the number of errand trips that need to be made with an automobile. These routine runs make up nearly 80% of vehicle trips, so locating residences closer to community amenities is crucial.⁷⁸ CASP borders and includes the commercial districts of several neighborhoods, including the commercially zoned land along Figueroa to the north, the Lincoln Heights Historic Preservation Overlay Zone (HPOZ) area along Broadway to the east, and Chinatown to the west. Siting new growth in a smart location “[reduces] the incidence of obesity, heart disease, and hypertension by encouraging daily physical activity associated with walking and bicycling.” Development that is located within existing public transit infrastructure – or “locations shown to have multimodal transportation choices or otherwise reduced motor vehicle use, thereby reducing greenhouse gas emissions, air pollution, and other adverse environmental and public health effects associated with motor vehicle use” – allows for alternative modes of transportation that also require more physical activity. CASP is served by three Metro Gold Line stations – Chinatown, Lincoln Heights, and Heritage Park – that provide frequent access to downtown Los Angeles, neighborhoods in Northeast and East Los Angeles, and the cities of South Pasadena and Pasadena.⁷⁹

In addition, CASP is located in a designated federal high-priority location, the Federal Empowerment Renewal Community Zone, awarding it a bonus point under LEED-ND smart location criteria. CASP also contains Brownfield sites that are targeted for redevelopment. Siting development in areas that are overburdened – that is, low-income communities or communities of color – is an important

consideration in addressing the disparities and inequities in public health. Poorer communities have lower rates of exercise, and increasing moderate physical activity from daily walking will have a significant benefit: Lawrence Frank notes in *Health and Community Design: The Impact of the Built Environment on Physical Activity* that “physical activity follows a dose-response curve, wherein the marginal benefits to increased exercise accrue the most to those who are the least active to begin with.”⁸⁰

Mix of Uses

Providing a mix of land uses within a neighborhood is an important smart growth characteristic for public health and equity. Mixed-use development – the co-location of multiple uses as opposed to the separation of uses – decreases distances between destinations, an important strategy for increasing travel on foot or by bike. Mixed use is characteristic of older neighborhoods that are scaled for pedestrians and designed to encourage walking over automobile travel.

Zoning codes have “long prohibited multifamily housing in single-family districts, despite the benefits that such mixing might have in terms of equity.” Multifamily housing allows a greater number of people to live in an area close to employment and amenities. CASP is innovative for Los Angeles in that it only allows for multifamily housing, and it designates three new mixed-use districts that allow for residences, businesses, and industries to be all located in close proximity to one another. Only mixes that have “benign influences” on surrounding uses have a positive impact on environmental health; CASP breaks new ground by permitting light industrial and manufacturing land use that goes hand-in-hand with the emerging clean technology and green manufacturing trends. Industrial uses in CASP are consistent with current zoning, but with the increased demand for residences in the area – as evidenced by the unplanned 900 units of housing that were developed in Area Three of CASP – this strategic, master planned approach prevents incompatible uses and promotes healthy land use mixing and growth moving forward. This may have an effect on traffic patterns and local exposure to air pollution, which will be discussed in the next chapter. Figure 9 describes the three new mixed-use zoning districts that allow for physical activity through daily activities:⁸¹

Limits Table

Use Classifications	Greenway	Urban Village	Urban Innovation	Urban Center
Commercial Office	N/A	65% ¹	10% ¹	65% ¹
Retail/Restaurants/Bars	1,200 sf ²	20,000 sf ²	5,000 sf ²	100,000 ²
Residential Multi-Family	N/A	90% ³	15% ³	15% ³
Hotels	N/A	150 rooms	100 rooms	200 rooms

Figure 9: New mixed-use districts

Research suggests that greater land use mix is correlated with lower levels of obesity. In addition, “the more school, grocery stores, newsstands, and other useful destinations in an area, the more likely residents are to walk ... Mixed land use may also be important for encouraging mobility among the elderly. Research has found that individuals aged 65 and over who live closer to shops and services are more likely to walk and use public transportation, and take more total trips outside the home.” A mix of markets and full-service grocery stores accessible near places of work and residents allows for healthier diets.⁸²

CASP allows for a number of ancillary uses on a single site – uses that are “limited to 10 percent of the on-site principal use” – but perform important functions “for the use and benefit of the use and benefit of the employees and families, residents, or patrons of the nearby industrial / commercial / recreational / transit / residential / educational facilities such as food and beverage stores, health and personal care, recreational facilities, book stores, or similar uses.” This allows for the vertical mixing of uses – for example, an apartment unit over a small retail shop, which presents possibly the shortest distance to travel – just a couple flights of stairs -- for essential goods, reducing unnecessary vehicle travel and air pollution associated with cold-starts from automobile engines. Studies have found that large office developments without retail and other services “contribute greatly to local traffic congestion;” having a sufficient mix of uses, on the other hand, provides the non-motorist a number of destinations to access.⁸³

There needs to be further research, however; analyses of land uses tend to be measured on too large a spatial level, when in fact it should be studied at small, local level -- the level at which walking

and biking makes sense. In addition, zoning patterns are only one part of the “urban form equation [among many] in creating environments that encourage physical activity.”⁸⁴ Recent research has identified which land uses promote walking.⁸⁵

Density and Compact Development

Dense, compact development is important for promoting public health, as density is “intimately related” to how people travel: “the density of population and employment over a given spatial area is one of the most widely used indicators of urban form for scholars interested in understanding travel patterns.” Density, a measure of compactness, has an effect on travel behavior by locating places closer together, reducing the need to travel by automobile, and providing mode choice alternatives like bicycling and walking. Compact development has been shown to reduce vehicle miles traveled (VMTs). One study of twenty-eight neighborhoods in California studied the effects of four different neighborhood characteristics on VMTs per household, and density was found to be the most influential variable of those examined: “a doubling of residential density levels produced 25-30 percent fewer miles driven per household.” Higher levels of density could also increase access to green public spaces and parks that can be used for recreational physical activity.⁸⁶

Sufficient levels of density provides the necessary concentrations of people to support transit use. Research suggests there is a density threshold to provide the ridership needed for transit to be financially feasible: thirteen people per acre. A study of travel patterns indicates that increasing density at a low level has a minimal effect on transit use, but at higher levels, vehicle miles traveled fell rapidly. The effects of increasing density, therefore, appear to be nonlinear, and its impact is felt only at a certain point when non-motorized transport is viable and driving and parking become increasingly expensive. Transit in areas with high density are also more effective at attracting riders because transit stations are more likely to be within walking distance of people. Reduced vehicle miles traveled and increased transit use improves air quality and is correlated with more physical activity and better public health. To take advantage of the density and compact development and provide alternatives to driving and encourage physical activity,

CASP requires projects to provide information about local transit service at the entrances of each building.⁸⁷

There are multiple methods of measuring density, such as the number of people, households, or employees in a given area. The presumption is that higher population density results in shorter on-the-ground travel distances over a given area. This belief is actually based on the idea that higher population densities are correlated with higher concentrations of so-called trip ends – the origins or destinations of a trip – within a given area. With a higher density of trip ends, there are shorter trip lengths between two points, reducing the frequency of traveling outside the Plan Area. However, it is difficult to evaluate the density of possible destinations – like businesses, restaurants, and houses – so population density remains the standard as a proxy for trip ends. In the case of CASP, density is encouraged through floor area ratios and bonus transfer floor area ratios, and there is no dwelling unit per acre limit. (See Appendix B).

Finally, it is important to note the difference between density and crowding – the former is healthy, the latter is not, even though both are commonly conflated together. Jane Jacobs observes there is a “long-standing bias within the American psyche against high densities.” The high levels of density in CASP encourage walking and physical activity, whereas overcrowding poses a challenge for safety and disease. Density – the number of dwelling units per acre – is different from crowding – a high number of residents per room.⁸⁸

Urban Design

Urban design plays a crucial role in enabling healthy active living. Traditional development is associated with the “monstrous-yet-monotonous ugliness of the endless strip malls and parking lots that have proliferated from one end of the country to the other” (Frank 3). These lowest-common-denominator designs not only are an eyesore, but they also perpetuate sedentary, car-dependent lifestyles that are one of the causes of obesity and poor public health outcomes. Frank elaborates:

“Urban design characteristics influence how people perceive the built environment. Design plays a large role in determining whether an environment is perceived as hostile or friendly, attractive or ugly, and vibrant or dull. Urban design denotes small-scale features of the built environment

that impact how people feel about being in specific places” (Frank 7).

He goes on; good urban design is correlated with physical activity:

“Environments that encourage moderate physical activity may also have features that make them more livable in other ways, by improving one’s quality of life – they may generate more social interaction, foster less dependence on the automobile, be safer for their inhabitants, and give people more choices with respect to how they get around and spend their time” (Frank 8).

Clearly, attractive urban design is important for health and wellbeing.

Studies have tried to measure urban design qualities related to walkability (Reid Ewing study).

The New York City DDC, DOT, and City Planning have created Active Design Guidelines that “[promote] physical activity and health in design.” The National Center for Bicycling and Walking created an “Increasing Physical Activity Through Community Design” document. Researchers are actively trying to evaluate urban design qualities for criteria that promote public health. Likewise, CASP has extensive urban design guidelines and regulations that have the potential to improve health outcomes.

Architectural Detail

The U.S. Green Building Council set out to develop LEED-ND standards to include several urban design criteria that promote walking. For example, there are requirements on facades and entries that keep the street wall near edges of the property line, such that buildings are close to the street, not far back with massive parking lots in front. This promotes a walking environment. Similarly, ground-level retail must have minimum amounts of clear glass facades.

CASP has urban design that promotes walking. For instance, there are many requirements that pertain to entrances. Buildings should be oriented to the street “to promote sidewalk activity and reinforce the pedestrian environment along the sidewalk.” The primary entrance of a building should be on a public street, with an entrance available every 75 feet on average, except on Local Industrial Modified Streets. The primary entrance shall not be permitted from a parking area, and residential entries must be at the same elevation as the sidewalk, apart from secondary entries, which allow up to five steps. Windows need to look out onto the street.

Streets play an important role in creating a pleasing urban form that encourages walking. Connectivity, “the number of publicly accessible street intersections per square mile, including intersections of streets with dedicated alleys and transit rights-of-way,” promotes transportation efficiency. LEED-ND requires internal connectivity of at least 140 intersections per square mile, and streets intersecting at street intervals at least every 800 feet. Greater connectivity results in more direct routes between destinations, allowing for the “network” distance to be not much further than the “crow fly” distance (Frank 100).

Smaller lots are better (Frank 147) – the coarser the grain, the worse the neighborhood will be for physical activity. The reason is that typical large commercial and retail developments increase distances between destinations within the development itself, mostly due to the large surface parking lots that invariably accompany such development. New York City Active Design Guidelines note: “Try to provide pedestrians with the most direct possible routes between destinations and with a choice of routes. Avoid long, continuous blocks” (NYC 37). “Encourage walking by maintaining a network of interconnected streets and sidewalks. In recent studies, higher street connectivity - as measured by small block sizes, for example - has been associated with increased pedestrianism.”

CASP has maximum block lengths for each of the three districts. Urban Village blocks are limited to 450 linear feet in length, Urban Innovation blocks are limited to 600 linear feet, and Urban Center blocks are limited to 500 feet. CASP breaks large parcels of land into smaller pieces with new accessways. For example, 24-hour publicly accessible pedestrian passageways will divide the current DWP facility block into six more manageable pieces. These passageways have design standards and count as open space.

Street design refers to the layout and design of streets and street segments. Streets are where the majority of physical activity takes place in the built environment; they are where people walk, jog, and bicycle. Streets connect destinations like parks to one another, and they are where social activities occur. The more desirable of a street, the more likely certain forms of physical activity will take place: streets “influence physical activity by shaping one’s desires to engage in such activity within the built

environment” (Frank 154). According to Jane Jacobs, streets are a city’s “most vital organs,” and “if a city’s streets look interesting, the city looks interesting” (Frank 154). A pleasant street influences a person’s perception of the safety, physical, and social attractiveness of the areas immediately adjacent, increasing the likelihood of walking, jogging, and bicycling.

Streets serve as a stage for social interaction. It is the stage at which social activity occurs, from planned activities to spontaneous ones, like sitting on a bench, eating or drinking at an outdoor cafe table, window shopping, playing, conversing with others, people watching, bumping into a neighbor for a chat, or other activities that are dependent on place and setting (Frank 159). “Pedestrian networks ... are almost always fragmented, meaning that the sidewalk system will abruptly end at one place and then begin again one, two, or even many blocks later (Frank 100). This is the reality, as most streets are designed with vehicle traffic flow in mind: “American traffic engineers as well as many transportation planners ... [define streets] in functional terms” based on “Green Book” standards (Frank).

CASP recognizes the need for “shared use of streets not only for moving traffic, but also as the front door to businesses that are the economic and fiscal foundation of the City and as public outdoor space for residents and workers” (CASP 10.01). CASP serves to have an efficient but balanced system of circulation that “defines different types of streets based on their function and community role.”

For example, Collector Modified south of Metro on Ave 26, currently a Secondary Highway with narrow sidewalks, no street parking, concrete, no landscaping, no trees or shade – “emphasizes multi-modal neighborhood travel and serves as a “Main Street” for Urban Villages and Urban Centers. A Collector Modified Street has one vehicle lane in each direction. Typical features include wide sidewalks, exclusive bicycle lanes, on-street parking, landscaping, and stormwater BMPs.”

There will be a CASP Streetscape Plan complimentary to Specific Plan and proposed Project Area. There will be aggressive street modification whereby most of the major arterials are downgraded to a Modified Collector, provide for wider sidewalks and bike lanes.

Chapter 4 / Land Use and Toxics Findings on CASP

This chapter assesses the Specific Plan in relation to this report's Ground Truthing findings, making a projection as to how overburdened populations will likely be impacted by the Plan in terms of exposure to environmental hazards and air pollution. A GIS spatial analysis of the proposed Specific Plan in relation to current sources of hazards and sensitive receptor sites identifies potential land use conflicts under the Plan. While the previous chapter shows that the Specific Plan can improve environmental justice by enabling community members of different backgrounds to perform utilitarian physical activity and active recreation, this chapter highlights concerns that the Plan will continue to allow for disproportionate exposures to air pollution among overburdened populations, particularly those coming from mobile sources.

Permitted Uses

The proposed Plan addresses many of the current incompatible land uses by identifying permitted uses, as well as uses that are prohibited, permitted up to a limit, or permitted under certain conditions. Some polluting land uses, such as heavy manufacturing and trucking terminals, will not be permitted in the Plan Area at all, reducing the potential for further environmental injustice in the neighborhood. However, instead of adhering to the City's present list of 236 identified uses, the Plan utilizes a more generalized group of "use categories" to allow for more innovative uses that are currently not permitted but would be appropriate in one of the Plan's urban districts. The greater flexibility of the use categories "[leaves] room for some interpretation," but the City believes that it is an acceptable trade-off. Some of the current potentially hazardous land uses, such as scrapyards, are not included in this group of use categories. One recommendation described in the following chapter is to specify certain non-permitted standard uses in the Plan to supplement the general use categories.

Currently trucking and transportation terminals burden the southern portion of the Plan Area, making up a large percentage of the environmental hazards that the community identified. The Plan

would prohibit this use category – defined as “the dispatching, maintenance, and long-term or short-term storage of large vehicles such as tractor-trailers [and] catering trucks” – in all districts of the Plan Area, preventing a further build-up of such facilities. The Plan also restricts warehousing and storage uses, another identified potential hazard in the Area, to ancillary uses, which are limited to a maximum of ten percent of the on-site principal use. Ancillary uses are “intended specifically for the use and benefit of the employees and families, residents, or patrons of nearby ... facilities,” and they are not permitted to exceed a floor area ratio of 1.0. This restriction, along with maximum block length regulations, effectively halts the growth of large warehouses that presently contribute to increased truck traffic and local air pollution.

Other potentially polluting land uses continue to be permitted, though only through a conditional use permit, which “does not re-zone the land but specifies conditions under which a particular land use will be permitted” (50 ARB). Conditional use permits often require a public hearing procedure and impose specific restrictions to minimize the use’s effect on its surroundings. New uses under the automobile fueling and service station category, which are currently scattered throughout the Plan Area, will require a conditional use permit, as would uses under the waste management and remediation category. The Plan’s parking cap will begin to address the number of large, heat-soaking black asphalt parking lots in the Plan Area that are currently perceived as environmental hazards in the urban environment

The three districts in the Plan each permit different use categories to prevent further incompatible land uses. Truck repair and maintenance facilities are not permitted in the mostly residential Urban Village, though such a facility sited in an Urban Center or Urban Innovation district adjacent to a place of residence would still be permitted. In terms of siting sensitive populations, hospitals and nursing care facilities are only permitted in the Urban Village district, separating these sensitive uses from potential industrial hazards. Religious and social service organizations are also permitted in the Urban Village, or in the Urban Center as an ancillary use, but not in the primarily industrial Urban Innovation district. Recreation and spectator sport facilities are limited to ancillary uses in the Urban Innovation district but

are permitted elsewhere. Similarly, schools and colleges in the Urban Innovation district are restricted to those that provide technical training.

Through the permitting of use categories, the Plan prevents the further build-up of some incompatible land uses between sensitive populations and major environmental hazards. Unfortunately the Plan itself is only a land use document, and without a comprehensive mechanism by which development can happen, existing land use conflicts will remain. The following chapter proposes a comprehensive, community-developed framework to bring about these improvements.

Performance Standards

The Plan imposes a number of performance standards on new projects that developers must adhere to. These performance standards have the potential to limit exposure to hazards and air pollution among overburdened communities. The California Air Resources Board (CARB) recommends performance standards as one of the important “mechanisms for integrating localized air quality concerns into land use processes” in its *Air Quality and Land Use Handbook*:

In the context of land use planning, performance standards are requirements imposed on projects or project categories through conditional use permits to ensure compliance with general plan policies and local ordinances. These standards could apply to such project categories as distribution centers, very large gas dispensing facilities, auto body shops, dry cleaners, and metal platers. Land use agencies may wish to consider adding land use-based performance standards to zoning ordinances in existing mixed-use communities for certain air pollution project categories. Such standards would provide certainty and equitable treatment to all projects of a similar nature, and reserve the more resource intensive conditional or special use permits to projects that require a more detailed analysis. In developing project design or performance standards, land use agencies should consult with the local air district. Early and regular consultation can avoid duplication or inconsistency with local air district control requirements when considering the site-specific design and operation of a project.

There are two performance standards in the draft Plan that pertain to air quality. One of them concerns the siting of sensitive land uses, specifically, K-12 schools, residential, or residential portions of mixed-use Projects. Those uses “shall be located no less than the allowable minimum distances to existing industrial land uses, or industrial land uses in a new mixed-use development as defined for each industrial use by the California Air Resources Board (CARB).” However, the Air Resources Board has

only established guidelines, not regulations, for “allowable minimum distances” between sensitive land uses and specific industrial land uses. While the City has indicated an interest in establishing these guidelines as a standard in the Plan Area, sensitive land uses may continue to be sited next to permitted hazards under the draft Plan. A recommendation described in the following chapter is to require the siting of all future sensitive land uses to comply with the ARB land use guidelines, or to require a conditional use permit for sensitive land uses sited less than the recommended allowable minimum distances to specific industrial uses.

The second air quality performance standard requires sensitive land uses located less than 500 feet from a freeway to “disclose the unhealthful implications of residing within 500 feet of a freeway to residents who are purchasing or renting housing in these locations and ... implement mitigation measures to reduce exposure to air pollution.” The following findings suggest there are a number of areas where sensitive land uses can be sited within 500 feet of a freeway under the Plan.

Finding #1: Concentrations of Sensitive Populations Continue to be Allowed Near Freeways

The Specific Plan rezones several parcels of light manufacturing land into Urban Village districts. While this rezoning increases the amount of land available for infill development within the Plan Area and allows the neighborhood to accommodate more residents, this potentially exposes new concentrations of sensitive receptors to mobile source particulate air pollution from highways and high-traffic roads. For example, the current Stadco light manufacturing facility is adjacent to the I-5 freeway and will be rezoned as an Urban Village, which permits up to 90% residential use. The vast majority of light manufacturing to Urban Village rezoning occurs west of the Los Angeles River, however, which is further away from any freeways and does not experience the same level of traffic.

Residential areas that are presently adjacent to freeways will continue to expose sensitive populations to mobile-source particulate pollution. The Plan is ultimately limited in what it can do for existing R2-R1 homes, indicating that mitigation measures are perhaps the only option to address this concentration. The existing 900 units of apartments along the I-5 freeway and Avenue 26 which were

unplanned for will continue to face this same problem, with the City pointing to cleaner, non-polluting vehicles as a possible solution.*

Major portions of the new Greenway will be located within a close distance to freeways, a reality of the extensive highway infrastructure that parallels the Arroyo Seco and intersects the Los Angeles River. The Arroyo Seco and Los Angeles River Confluence Center is shadowed by the I-5 and I-110 interchange, and the Lacy Street Neighborhood Park will continue to be adjacent to the I-110 on-ramp. The Plan permits the “recreation facilities and spectator sports” use category along the entirety of the Greenway. A recommendation in the following chapter is to restrict that use along the Greenway in areas sited within 500 feet of a freeway. The new park in the Fire Department lot sited among an Urban Village away from any freeways appears to be a better siting of an active recreation facility.

Finding #2: Sensitive Land Uses Continue to be Allowed Within A Close Distance From Hazards

Without requiring future land uses to comply with ARB siting guidelines, or without banning specific uses (beyond having a use category) that pose an environmental hazard, there is still the potential for new incompatible land uses. The present truck manufacturing corridor could remain an issue, which is a permitted use in the Urban Innovation district that abuts homes and leads to traffic. At the same time, if this Urban Innovation district were to be redeveloped with new green non-polluting industries, the Urban Innovation ideal, it could serve as a buffer between the R2-1 homes and the heavy industry and transportation terminals -- the rail yards, the cement manufacturing plant, and the UPS facility -- just outside the Plan Area. Furthermore, the reduced size of the blocks through urban passageways may altogether discourage similar uses from continuing.

The Plan needs to take into consideration adjacent, neighboring uses that fall outside the Plan Area, as well as adjacent major truck traffic corridors such as Main Street. The new Urban Village area and existing Excel school falls within the buffer of the UPS facilities.

Environmental Impact Report (EIR)

The draft program Environmental Impact Report, expected to be out May 2011, will provide further analysis as to how the Plan will impact local air quality, and if it will expose sensitive populations to environmental hazards. The purpose of the Ground Truthing and this environmental justice profile is to provide community-based findings, observations, and hypotheses that can supplement the EIR. Once the DEIR is completed, the city will submit the CASP for review by the South Coast Air Quality Management District (SCAQMD) to further assess this plan. See Appendix C for initial submission.

Chapter 5 / Vision Moving Forward

The Cornfield Arroyo Seco Specific Plan makes major headway in improving environmental justice in Lincoln Heights, as an example of how Specific Plans can be an effective tool in addressing the environmental inequities in overburdened communities. An analysis of CASP suggests that it can encourage physical activity and public health through utilitarian walking and active recreation, and the Specific Plan does not permit a number of currently hazardous use categories. However, the Plan does not completely address the issue of siting sensitive land uses in close proximity to hazards, particularly mobile-source emissions. This report contributes to existing discussion as to whether smart growth and infill development in urban areas can improve environmental justice outcomes.

Framework

This report proposes a framework developed after conversations with SEACA staff and members. At the very core of the debate around the Specific Plan, SEACA is fearful of gentrification and displacement that could result from redevelopment; they see changes like the Brewery Arts Colony and new cafes and lofts as an imposing and unwelcome presence that are a threat to local businesses. They have tried to inform local businesses just outside the proposed Project Area of potential implications of the Plan, and they assert that the nearby Lincoln Heights Business Improvement District (BID) is equally fearful of the Redevelopment Plan, afraid of the unfair competition presented by these new businesses. At the same time, they see local businesses and industries struggling with the economic downturn. They would like the City to help small businesses in the area to thrive and reinvest in the area with signage improvements and other enhancements.

Without the Redevelopment Plan, there lacks an impetus for any changes to happen, both for better or worse. There is an irony in that in order to see the cleaning up of this neighborhood, there is also the pressure of displacement and change in character. After all, there is no environmental justice if

environmental health is improved but the existing residents cannot afford to see the benefits of this change.

Therefore the framework proposed by this report, similar to the Clean Up Green Up framework, is to advocate for a comprehensive policy solution, one in which there is community-directed reinvestment into the neighborhood to provide for clean and green living-wage jobs. The City should “use permitting, tax and utility rebates, and economic incentives to prevent new sources of pollution, begin to reduce existing pollution, and transform the neighborhoods by attracting new green businesses and helping existing businesses upgrade and continue to provide jobs.”

Recommendations

Include C ARB Guidelines in the Plan:

The Specific Plan should require the siting of all future sensitive land uses to comply with the CARB land use guidelines, or require a conditional use permit for sensitive land uses sited less than the recommended allowable minimum distances to industrial uses. This effectively creates buffer zones between sensitive receptors and hazards.

Include a Non-Permitted Use List:

The Plan should specify non-permitted North American Industry Classification System (NAICS) or standard uses to supplement the group of use categories to prevent specific polluting uses.

Conduct Further Research:

The City should conduct further research to assess how the Specific Plan can be a tool for improving environmental justice outcomes. The Environmental Justice Profile presented in this report serves to supplement existing and future research that could include more data, more screening, and more mapping. Researchers are developing scientific techniques to better plan for public health outcomes from the built environment. Sources of data like in Appendix D, a MATES III SCAQMD mapping of cancer risk in Southern California, build a case for further environmental justice work in the Lincoln Heights community.

Conclusion / Further research

This report reframed the discussion around smart growth and sustainable development by emphasizing the need to explicitly integrate environmental justice objectives into planning, beyond the presumption that progressive land use policies automatically equate to healthier communities. Specifically, this report looked at the environmental justice situation in Lincoln Heights, and it determined that the community within the Specific Plan was in fact disproportionately burdened by the effects of air pollution. This report evaluated the Specific Plan and concluded that it holds the potential for improving the environmental justice situation in the neighborhood.

Appendix A

Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities*

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	<ul style="list-style-type: none"> Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	<ul style="list-style-type: none"> Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

*Notes:

- These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

Appendix B

FLOOR AREA RATIO

2.3.1. A Base FAR (Base FAR) and Maximum FAR (Max FAR) is established for each parcel as set forth in the FAR Table below.

2.3.2. Additional FAR, up to the Max FAR, can be added to the Base FAR through either the Bonus FAR and/or Transfer of Floor Area (TFAR) Programs.

2.3.3. The proportion of uses established in Sections 2.2.1 to 2.2.3. shall remain applicable regardless of the projects resulting FAR.

FAR Table

Density	Greenway	Urban Village	Urban Innovation	Urban Center
Base FAR	1.5	3	3	3
Base FAR within River Buffer Areas	1.5	1.5	1.5	1.5
Max FAR	1.5	5	4	6
Max FAR within River Buffer Areas	1.5	1.5	1.5	1.5

Appendix C



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 ∞www.aqmd.gov

March 5, 2009

Ms. Claire Bowin
City of Los Angeles
Department of City Planning
200 N. Spring Street, Room 721
Los Angeles, CA 90012

Dear Ms. Bowin:

Notice of Preparation of a Draft Environmental Impact Report (Draft EIR) for the Cornfield Arroyo Seco Specific Plan

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft environmental impact report (EIR). Please send the SCAQMD a copy of the Draft EIR upon its completion. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files. Electronic files include spreadsheets, database files, input files, output files, etc., and does not mean Adobe PDF files. Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: www.urbemis.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM_{2.5} emissions from construction and operational activities and processes. In connection with developing PM_{2.5} calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM_{2.5} emissions and compare the results to the recommended PM_{2.5} significance thresholds. Guidance for calculating PM_{2.5} emissions and PM_{2.5} significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html.

Ms. Claire Bowin

-2-

March 5, 2009

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>.

It is recommended that lead agencies for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles, perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: <http://www.aqmd.gov/prdas/aqguide/aqguide.html>. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: <http://www.arb.ca.gov/ch/handbook.pdf>. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (<http://www.aqmd.gov>).

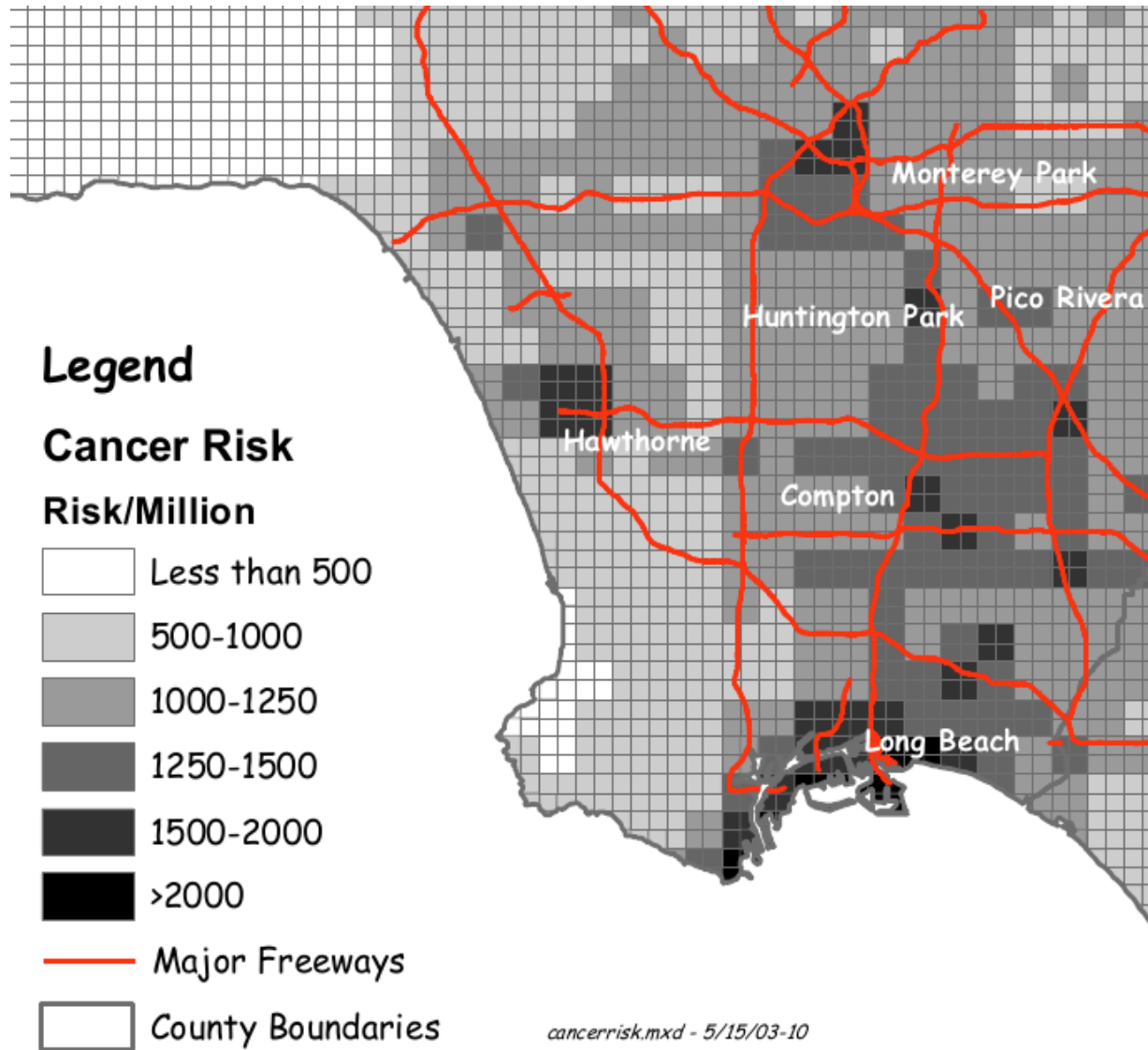
The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Daniel Garcia, Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:DG:AK
LAC090303-04AK
Control Number

Appendix D



Appendix E: Ground Truthing Data

Hazards Identified by the Community

	Address	bg_lat	bg_long	Description	TYPE
UPS Distribution Center	S Ave 18	34.065117	-118.222846	Intense truck traffic; polygon? Non-CASP	Warehouse WVTT
Sea Snack Cold Storage		34.067719	-118.228743	trucks	Warehouse WVTT
Swiss Dairy distribution center / warehouses?		34.069180	-118.223121	Trucks	Warehouse WVTT
UPS Distribution Center	S Ave 18	34.065117	-118.222846	Intense truck traffic; polygon? Non-CASP	Warehouse WVTT
DC Company Pick-up / Drop-Off	317 N Ave 17	34.076519	-118.224218		Warehouse WVTT
Anhing Foods	418 Ave 19	34.077670	-118.224459	truck loading	Warehouse WVTT
Warehouse	Artesian St	34.082435	-118.216835	Warehouse with rugs; truck loading	Warehouse WVTT
School bus yard		34.062829	-118.235173		Truckyard
Truck lot		34.067305	-118.220468		Truckyard
Truck lot		34.066747	-118.218445	Parking for trucks	Truckyard
DOT Central Yard	1831 Pasadena	34.073971	-118.222892		Truckyard
DOT Yard General Services	401 N Ave 19	34.076839	-118.224597		Truckyard
DOT Yard		34.076636	-118.223728		Truckyard
City of Los Angeles Transfer Site	452 N San Ferna	34.079574	-118.224028	Dumptruck traffic, refueling	Truckyard
Grand Central Used Auto Parts	1916 Darwin Av	34.067160	-118.218692		Scrapyard
R&F Used Auto Parks	502 S. Ave 17	34.067240	-118.221183		Scrapyard
ACE Auto Parts and Dismantling	1785 N Main St	34.067092	-118.221583		Scrapyard
LA Auto Wrecking	1718 Albion	34.067982	-118.223224		Scrapyard
Alpine Auto Dismantling and Repair	337 W Ave 26	34.080941	-118.219161	Auto repair	Scrapyard
Recycling Center		34.062747	-118.233740	Visible smoke stack	Recycling center
Metrolink		34.085966	-118.226923		Rail yard
DWP Facility		34.067020	-118.226116	transformer?	Powerplant
	Marmion Way	34.086769	-118.214457	Power plant facility?	Powerplant
Atlas Carpet Mills		34.067955	-118.221370	Steam or smoke from chimney	Mfg
Atlas Carpet Mills		34.067851	-118.221736		Mfg
General Truck Body		34.068814	-118.222373	Truck mfg corridor	Mfg
General Restaurant Equipment (Truck	333 S Ave 17	34.068149	-118.221974	Truck spray booth	Mfg
General Truck Body		34.068385	-118.222104	Truck mfg corridor	Mfg
Cemex	625 Lamar St	34.066356	-118.223309	Cement manufacturing Non-CASP	Mfg
Bromack Cabinet Millwork Inc	3005 Humboldt S	34.081276	-118.216497	Millwork; shipping/receiving	Mfg
Bus refill		34.066218	-118.235394		Fuel refill
School bus yard		34.068366	-118.228324		Fuel refill
76 Gasoline	Broadway	34.072947	-118.220031		Fuel refill
Chevron		34.084328	-118.222439		Fuel refill
Thrifty		34.083927	-118.222782		Fuel refill
Valero		34.083860	-118.221942		Fuel refill
76 Gasoline		34.083510	-118.222320		Fuel refill
Angelica Linen	451 N San Ferna	34.079330	-118.224841	visible steam, chemicals	Dry cleaning
R&R Auto Repair		34.071335	-118.222445		Auto repair
Car repair facility	Broadway	34.073180	-118.220254		Auto repair
Abe's Battery Service	215 San Fernanc	34.075870	-118.222468	car repair, batteries	Auto repair
Broadway Radiator Shop		34.074514	-118.221027		Auto repair
Rangel Auto Repair	223 W Ave 26th	34.079315	-118.217846		Auto repair
Universal Automotive Service	2225 Pasadena	34.075936	-118.218238	Next to homes	Auto repair
Smog Check Test Only		34.083925	-118.223765	truck parking as well	Auto repair
J Auto Body and Paint	3300 N Artesian	34.083825	-118.216136		Auto paint

Sensitive Receptors Identified by the Community

Name	Address	bg_lat	bg_long	TYPE	Description
Xian Wu San charity	1305 N Broadwa	34.069814	-118.232252	Church	
St Peter Italian Church		34.067735	-118.235318	Church	
Milagro Excel Charter School		34.067079	-118.219951	School	Right next to truck yard and homes; zoned as
Downey Recreation Center		34.069900	-118.222687	Park	Across from truck mfg corridor
Iglesia Cristiana Pentecostes	308 S Avenue 1	34.068962	-118.222021	Church	Truck mfg corridor
Our Lady Help of Christian's School		34.067227	-118.217855	Church	
Our Lady Help of Christian's School		34.067185	-118.217048	School	Faces 5
Lincoln Heights Baptist Mission		34.069078	-118.217883	Church	Faces 5
Albion Street Elementary		34.069459	-118.220353	School	
Albion Early Education Center		34.068607	-118.220290	Childcare	
Downey Recreation Pool		34.071524	-118.223256	Park	
Downey Childcare Center	219 S Avenue 1	34.070904	-118.222293	Childcare	
Young Nak Church		34.072369	-118.223331	Church	
Young Nak Church		34.073164	-118.222534	Church	
Bilingual Foundation for the Arts	421 N Ave 19	34.077537	-118.224882	Arts	Lincoln Heights jail
Young Nak Church		34.074661	-118.223983	Church	Huge parking lot
Homes Along N Ave 18	N Ave 18	34.074719	-118.224546	Residential	Zoned as Light Manufacturing, next to repo lot
Goodwill / WorkSource Centter	San Fernando R	34.077638	-118.222782	Org	
Alta Lofts	Humboldt and Se	34.076726	-118.222400	Residential	Zoned as
Lacy Street Neighborhood Park	Lacy Street and	34.082209	-118.220282	Park	Next to 110 on-ramp and Ave 26 (major corrid
Lacy Street Studio Lofts	2684 Lacy St	34.083452	-118.218092	Residential	Residential but zoned as Limited Manufacturing
Puerta del Sol Condo/Lofts	360 W Ave 26th	34.080757	-118.219685	Residential	Zoned as Commercial Manufacturing; affordat
Camino Al Oro Senior Community Livi	330 W Ave 26th	34.079906	-118.218927	Residential	Zoned as Commercial Manufacturing; affordat
Flores Del Valle	225 N Ave 25 (b	34.078422	-118.218938	Residential	Zoned as Commercial Manufacturing; affordat
Tesoro Del Valle affordable apartmer	2301 Humboldt S	34.079303	-118.219353	Residential	Zoned as Commercial Manufacturing; affordat
Homes Along W Ave 34	W Ave 34	34.083933	-118.214277	Residential	Zoned as Commercial Manufacturing
Homes Along W Ave 33	W Ave 33	34.083636	-118.214781	Residential	Zoned as Commercial Manufacturing
Lincoln Heights Spanish Church	Pasadena Ave	34.081957	-118.214325	Church	
Los Angeles Boys' and Girls' Club	2635 Pasadena .	34.077817	-118.215470	Park	Baseball field
Homes Along N Ave 23	N Ave 23	34.075829	-118.217966	Residential	Zoned as General Commercial; along Pasaden
Homes Along N Ave 23	N Ave 23	34.075952	-118.217662	Residential	Zoned as General Commercial; along Pasaden
Homes Along N Ave 23	N Ave 23	34.076238	-118.218338	Residential	Zoned as General Commercial; along 5 ramp
Homes Along N Ave 25	N Ave 25	34.078247	-118.218020	Residential	Zoned as Commercial Manufacturing; house
Santa Monica Mountains Conservancy		34.085675	-118.225145	Park	
Confluence Center		34.081957	-118.225589	Park	underneath freeway

Official Hazards

CHAPIS facilities

FID	LOH_HAD83	LAT_HAD83	FNAME	FSTREET	FCITY	FZIP	SIC2	GEOID
0	-118.232598	34.05715	LOS ANGELES COUNTY SHERIFF'S DEPARTMENT	441 BAUCHET STREET	LOS ANGELES	90012	92	2001_19_SC_SC_29411
1	-118.222831	34.06439	SMILAND PAINT COMPANY	620 LAMAR STREET	LOS ANGELES	90031	28	2001_19_SC_SC_53209

Chrome Plating facilities

X	Y	STAN_ADDR	ARC_STREET	ARC_CITY	ARC_ZIP	FACILITY_N	DISTRICT
-118.213987	34.062277	1748 N WORKMAN ST LOS ANGELES 90031	1748 N WORKMAN ST	LOS ANGELES	90031	CHROMAL PLATING CO	SCAQMD

DTSC sites

FID	Shape *	PROJECT_NA	ADDRESS	CITY	STATE	ZIP	SITE_TYPE
0	Point	LOS ANGELES NAVAL & MARINE CORPS RES.CEN	1700 STADIUM WAY	LOS ANGELES	CA	90012	State Response
1	Point	M.O.R.E. OIL COMPANY	645 S Avenue 21	LOS ANGELES	CA	90031	State Response
2	Point	KENNINGTON	3209 HUMBOLDT STREET	LOS ANGELES	CA	90031	Voluntary Cleanup
3	Point	BORTZ OIL COMPANY	1746 NORTH SPRING STREET	LOS ANGELES	CA	90012	State Response
4	Point	WILLIAM MEAD HOMES	1300 CARDINAL STREET	LOS ANGELES	CA	90012	State Response
5	Point	CORNFIELD SITE	1245 N. SPRING STREET	LOS ANGELES	CA	90012	Voluntary Cleanup
6	Point	VICTOR INDUSTRIAL BATTERY	138 N SAN FERNANDO RD	LOS ANGELES	CA	90031	Voluntary Cleanup
7	Point	SO CAL GAS/LA MAIN ST MGP	1630 NORTH MAIN STREET	LOS ANGELES	CA	90012	Voluntary Cleanup
8	Point	SO CAL GAS/RAMIREZ (ALISO) MGP	530 RAMIREZ ST	LOS ANGELES	CA	90012	Voluntary Cleanup
9	Point	JAYBEE SITE AT LINCOLN HEIGHTS - LA DWP	301 WEST AVENUE 26	LOS ANGELES	CA	90031	Voluntary Cleanup
10	Point	SO CAL GAS/ALISO E 490 BAUCHET ST. MGP	490 BAUCHET ST.	LOS ANGELES	CA	90012	Voluntary Cleanup
11	Point	SO CAL GAS/ALISO D MGP	CESAR CHAVEZ AND LYONS STREETS	LOS ANGELES	CA	90012	Voluntary Cleanup
12	Point	CENTRAL LOS ANGELES HIGH SCHOOL NO. 9	450 North Grand Avenue	Los Angeles	CA	90012	School Investigation
13	Point	WITCO/ALLIED KELITE DIVISION	1250 NORTH MAIN STREET	LOS ANGELES	CA	90012	Voluntary Cleanup

Intermodal facilities

FID	Shape *	ID	NAME	TYPE	MODE_TYPE	CITY	STATE	FIPS	ZIP	LATITUDE	LONGITUDE	CREATEDATE
0	Point	1498	UP-LOS ANGELES-CA-750 LAMAR	RAIL	RAIL & TRUCK	LOS ANGELES	CA	06	90031	34.06411	-118.22359	4/9/2003

Official Sensitive Receptors

FID	Shape *	COUNTY	PUBDISTRICT	SCHOOLNAME	CDSCODE	STREET	CITY	ZIP
0	Point	Los Angeles	nodata	Cathedral High School	19647336934400	1253 Bishops Road	Los Angeles	90012
1	Point	Los Angeles	nodata	Our Lady Help of Christians Elementary	19647336962900	2024 Darwin Avenue	Los Angeles	90031
2	Point	Los Angeles	nodata	Sacred Heart Elementary School	19647336963200	2109 Sichel Street	Los Angeles	90031
3	Point	Los Angeles	nodata	Sacred Heart High	19647336935800	2111 Griffin Avenue	Los Angeles	90031
4	Point	Los Angeles	nodata	Divine Saviour	19647336961000	624 Cypress Avenue	Los Angeles	90065

FID	Shape *	SCHOOLNAME	SCHOOL_ADD	CITY_06	SCH_TYPE_0	CHARTER_06	ZIP	RECNO_PUB
0	Point	Albion Street Elementary	322 South Avenue 18	Los Angeles			90031	8988
1	Point	Ann Street Elementary	126 East Bloom St.	Los Angeles			90012	8978
2	Point	Castelar Street Elementary	840 Yale St.	Los Angeles			90012	8925
3	Point	College Ready Middle Academy #5	2635 Pasadena Ave.	Los Angeles		Y	90031	9169
4	Point	Crittenton Placement CDC	234 East Ave. 33	Los Angeles			90031	10152
5	Point	Endeavor College Preparatory Charter	126 Bloom St.	Los Angeles		Y	90012	9172
6	Point	Excel Charter Academy	1855 North Main St.	Los Angeles		Y	90031	9255
7	Point	Florence Nightingale Middle	3311 North Figueroa St.	Los Angeles			90065	8541
8	Point	Griffin Avenue Elementary	2025 Griffin Ave.	Los Angeles			90031	8830
9	Point	Hillside Elementary	120 East Avenue 35	Los Angeles			90031	8812
10	Point	Loreto Street Elementary	3408 Arroyo Seco Ave.	Los Angeles			90065	8776
11	Point	Milagro Charter	1855 North Main St.	Los Angeles		Y	90031	9356
12	Point	Solano Avenue Elementary	615 Solano Ave.	Los Angeles			90012	8651

FID	Shape *	FNAME	ADDRESS	CITY	STATE	ZIPCODE	BG_LAT	BG_LONG
0	Point	AVENUE 28 HEAD START/STATE PRESCHOOL	220 EAST AVENUE 28	LOS ANGELES	ca	90031	34.079163	-118.214138
1	Point	CHINATOWN SERVICE CENTER CHILD DEV. CTR.	521 W. CESAR CHAVEZ AVE.	LOS ANGELES	ca	90012	34.059508	-118.241637
2	Point	CHOI HUNG HEAD START	817 N. YALE STREET	LOS ANGELES	ca	90012	34.063626	-118.240777
3	Point	CYPRESS PARK HEAD START	2630 PEPPER AVE	LOS ANGELES	ca	90065	34.089386	-118.225839
4	Point	FIRST 5 LA	750 N. ALAMEDA	LOS ANGELES	ca	90012	34.055617	-118.237412
5	Point	FLORES DE VALLE	225 N. AVENUE 25	LOS ANGELES	ca	90031	34.078439	-118.218261
6	Point	LAC+USC EMPLOYEES' CHILDREN'S CENTER	1401 N. MISSION ROAD	LOS ANGELES	ca	90033	34.063101	-118.211061
7	Point	UNION STATION GATEWAY CHILD DEVELOPMENT	1 GATEWAY PLAZA 99-PL-7	LOS ANGELES	ca	90012	34.0624	-118.2407
8	Point	VALLEJO HEAD START	2141 WORKMAN	LOS ANGELES	ca	90031	34.069817	-118.214465
9	Point	WILLIAM MEAD C.D.C. HEAD START	120 LEROY STREET	LOS ANGELES	ca	90012	34.065587	-118.229286

FID	Shape *	FACILITY	FACNAME	FACADD	FACCITY	ZIP	TYPE	COUNTY
0	Point	106190646	KAISER FOUNDATION HOSPITAL MENTAL HEALTH CENTER	765 COLLEGE STREET	LOS ANGELES	90012	1	19
1	Point	106190307	PACIFIC ALLIANCE MEDICAL CENTER, INC.	531 WEST COLLEGE STREET	LOS ANGELES	90012	1	19
2	Point	306194670	ALTAMED/BUENACARE HEALTH CLINIC	1701 ZONAL AVENUE	LOS ANGELES	90033	3	19
3	Point	306191109	CHINATOWN SERVICE CENTER FAMILY HEALTH CLINIC	600 NORTH BROADWAY	LOS ANGELES	90012	3	19

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