Resident-Centered Design: Analyzing the Redevelopment of Public Housing Projects in California Oliver Corpus

Professor Bhavna Shamasunder & Professor Seva Rodnyansky Urban and Environmental Policy Senior Research Thesis Fall 2022 - Spring 2023

Abstract

Much has changed in the design, funding, and policy regarding public housing projects in the United States ever since their conception. For decades, as a result of systemic inequity, lack of funding, inept policy decisions, and poor building design, public housing projects have been extraordinarily stigmatized. However, programs like HOPE VI or the Choice Neighborhoods Initiative along with tools like RAD fund private developers to revitalize distressed public housing projects both through investment but also the provision of new amenities and design principles in accordance with movements like New Urbanism. This study investigates to what degree the built environment within these redevelopments is prioritized around resident needs as well as how specific design elements and policies facilitate this process. To answer this research question, I interviewed 8 experts, architects, and developers who had worked with the redeveloped housing projects of Jordan Downs in Los Angeles and Hunter's View in San Francisco. Furthermore, I also conducted analysis of project guidelines and plans of both these sites as well as the undeveloped housing project of Estrada Courts in Boyle Heights. Ultimately, this research project recommends methods to cut through the red tape surrounding the financing of public housing projects, increase funding and non-profit support, standardize certain design elements, and to prioritize resident protections within these redevelopments.

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Introduction

Public housing projects within the United States have been stigmatized for their destitute conditions, high rates of crime, and low quality of living. These negative beliefs are oftentimes attributed to the poor architectural and design practices used to create these living conditions as well as the lacking federal policy that essentially isolated disenfranchised people of color within urban centers. These housing projects built in the 1940s-1960s were done so under the design ethos of modernist planning - which emphasized mid to high-rise buildings interspersed with greenery or public amenities, planning that many considered was not focused on the needs of inhabitants (Hendrix, 2021). Many public housing projects were destroyed under urban renewal programs and viewed as abject failures - however, recent initiatives to redevelop public housing projects now seemingly do so through the design principles of New Urbanism, a design and architectural movement that focuses on human-centric planning (Popkin et al., 2004).

This research project investigates how redeveloped public housing projects are centering building design around the needs of residents through both architectural design as well as the implementation of certain facilities. Furthermore, I hope to ascertain what design elements should be focused on in future redevelopment projects by assessing three projects in various states of redevelopment as case studies and comparing their floor plans, layout, and specific design elements. I have chosen three specific case studies of public housing in order to analyze the design and policy choices instrumental in constructing them.

These sites include Estrada Courts, a mid-century housing project in Boyle Heights that has not been redeveloped, "Hunters View" a site in San Francisco that was recently finished phase I of its redevelopment in 2013, and Jordan Downs, a project in Los Angeles that is currently undergoing redevelopment. Through these three case studies this project analyzes both design and policy choices in the redevelopment process of distressed public housing projects.

Short History of Public Housing in the US

The form of the traditional American public housing design in the 1960s and 1970s can be attributed to the designs of two planners: Le Corbusier and Ebenezer Howard. Le Corbusier's core ideas were of high-rise concrete and steel skyscrapers arranged in grids or block-like patterns, ideas that were later extrapolated to public housing projects in the late 50s and early 60s (Marmot 1981, 84). This "international style" was extraordinarily popular in Europe and was also known to many as "towers in the park" not only because of their height and the greenery around them, but also because of the spatial distance between structures. Howard's "garden cities" envisioned top-down planned cities interspersed with vegetation. Consequently, the main design characteristics of modernist public feature mid-to-high rise segmented blocks of concrete and steel, interspersed with patches of vegetation and greenery. For the sake of definition, high-rise buildings, according to the US National Fire Protection's definition, describe a high-rise as 75 feet tall, or about six to seven stories (Hall 2011, 9).

Public housing in the United States can be traced back to the passage of the Housing Act of 1937. The act established the United States Housing Authority which in conjunction with local authorities set out to fund and construct public housing projects for the disenfranchised poor affected by the Great Depression and alleviate the epidemic of slums, unemployment, and poverty (Hunt 2018; Stoloff 2004). However, in the post-war period public housing ran into fatal flaws. The 1949 Housing Act, as part of the process of urban renewal, implemented many public housing projects in the most distressed parts of America (Turbov et al. 2005, 5). Furthermore, many of the wartime-era homes were not designed to be permanent, obstruction of projects over issues of high costs and racial enclaves, and concentration of

buildings in poor areas all set the stage for the failure of public housing as it continued into the 1970s. The government turned to a more free-market solution in the 1960s, with the introduction of the Housing and Community Development Act of 1974. This act established the section 8 program which gave housing vouchers to low-income families to move to private housing, yet did little to revitalize distressed public housing projects (Hunt, 2018). Programs like the Low Income Housing Tax System (LIHTC), which was passed in 1986 essentially created or protected housing projects by allowing local agencies to award private developers with these credits, in an attempt to address the revitalization problem. As the federal government has moved away from the public housing projects towards voucher systems like Section 8, many of these projects have become refurbished and revitalized through programs like Rental Assistance Demonstration (RAD) or Home Ownership and Opportunity for People Everywhere (HOPE VI). HOPE VI, passed in 1992, focuses on rebuilding severely distressed housing projects, to a level LIHTC or Section 8 could not accomplish, guided in the revitalization process by the tenets of New Urbanism (O' Brien & Popkin 2020; Hunt 2018). However, HUD stopped funding HOPE VI in 2011, instead choosing to focus on the Choice Neighborhoods Initiative (CNI) which functions similarly to HOPE VI yet emphasizes the revitalization of entire neighborhoods, not just select homes (Couch 2014, 1). The design ethos of New Urbanism emphasizes community-centered designs and features like walkability, diversity of income and race, open space and greenery, and mixed-use infrastructure (Goetz, 2012). Consequently, these three projects undergoing various stages of development exhibit New Urbanism and more resident-focused input in the planning and design processes. However, the failed housing of the 1960s and 1970s raised questions about the design functions as a part of housing, especially how the problematic design language of modernism dominated the landscape of public housing.

Downfall of Public Housing Development Projects in the United States

Due to a combination of social flaws, policy failures, and–arguably–design flaws, modernist public housing projects in the United States are widely regarded as failures (Hendrix, 2021). Infamous works like the O. Pruitt Homes and William Agoe Apartments (Pruitt-Igoe) in St. Louis or the Robert Taylor Homes in Chicago as figures 4 and 5 show, have come to exemplify these disasters (Hunt, 2003).



Figure 1. Families and children cross in front of the Pruitt-Igoe homes, four years after their construction.



Figure 2. Image of one of the buildings in Robert Taylor Homes project in winter, 1989. All families were moved out of the buildings by 2005.

Financing

Despite the robust, vastly improved public housing complete with advanced amenities that was initially delivered by authorities, these projects soon fell victim to disrepair and lack of investment, especially in the 1960s as time went on. The original 1937 Housing Act said that part of the 10% burden of costs local authorities paid would be maintenance of the homes - yet this ostensibly beneficial clause came back to haunt authorities in the second half of the decade (Hunt, 2018). The trend for authorities to let the private developers build housing, adjustable-income based rents, and white flight, hollowed out housing projects, relegating the poorest of American social classes to live in public housing whereas the wealthier, working class were catered to by developers in the private sector (Stoloff, 2004). Consequently, many local authorities depended on federal subsidies to pay for maintenance and upkeep of homes, leading to gradual degradation - a process that was exacerbated by increased utility expenses in the 1970s as well as the HUD method for funding authorities which disproportionately penalized urban housing authorities (Hunt,

2018). Furthermore, trends such as an increase in housing rents, an availability of units due to white flight, the 1970s, and increased stigma towards existing projects, all meant the voucher system proved itself to be a viable alternative to building new projects (Kazis 2021, 9).

Racial Enclaves

Public housing projects were primarily concentrated in Black communities, resulting in a demographic of mostly poor, Black working-class residents. Of the 10,000 public housing units built in Chicago between 1954 and 1967 all but 63 were built in poor and racially segregated neighborhood" (Hendrix, 2021). Black families were isolated in increasingly destitute urban spaces while their white counterparts fled to live in suburbs, exacerbated by the phenomena of redlining, racial enclaves, and white flight (Rothstein, 2012). Furthermore, financial institutions denied black families access to loans, effectively preventing Black families access to buying homes and thus the ability to accrue generational wealth (Taylor, 2019). Although the literature disputing the impact building design had on the success of the projects is varied, the research on the cumulative effects of racist, segregationist policy on Black communities within these housing projects is unanimous in condemning segregationist government policy.

Changes in Contemporary Public Housing in the United States

Much has changed since the days of the Robert Taylor Homes or Pruitt-Igoe apartments.

However, in my analysis I focus not on the new forms of engagement with affordable housing and voucher programs, but the revitalization of these older public housing projects and their place in the new landscape of public housing. There is a clear move away from the superblocks of concrete to places with a sense of individualism and increased integration with existing urban spaces (Franck & Mostoller 1995). Programs such as Housing Opportunities for People Everywhere (HOPE VI) marked a radical shift in

public housing. Public housing authorities for the most part no longer built new projects due to the public backlash against these, but instead provide vouchers for residents to move into mixed-income units, revitalized projects, and subsidized units (Stoloff, 2004). This revitalization of old projects was done with the intention of addressing the failures of the past decade specifically through the creation of mixedincome projects that would deconcentrate poverty and racial enclaves (Popkin et al., 2004). There is also a marked shift away from the design ethos of the 1940s to 1960s. If those projects embodied the principles of the "International style" or "Modernism," HOPE VI and associated contemporary projects frequently utilized the principles of "New Urbanism." These principles emphasize a diversity of housing types and prices but also walkable neighborhoods that are sustainable and human-centric (Popkin et al., 2004). The physical layouts of the projects themselves moved away from "a superblock formation," into more decentralized units that connected the project to the surrounding neighborhood (Tach, 2009). However, that is not to say this is the sole design solution to new and redeveloped projects. HOPE VI suffered from tearing down too many projects and not replacing them with units, reducing overall supply (Keating, 2000). Ultimately, the history of public housing in America is long and convoluted and these changes within policy are not the main focus of my project - rather the prioritization of certain design elements in the evolving design ethos of the redevelopment in public housing.

How Architecture & Design Affect Communities

This literature review will provide an overview of how different design elements and factors in the built environment affect residents both mentally, physically, and emotionally. It is extremely important to note the dual potential within design; there are both the possibilities of design that either hem in and slowly decompose a community or build up a community to its maximum potential. I will also establish an overview of mid-century public housing design in the United States along with a comparison of how other countries abroad have implemented their own forms of public housing. Finally, I detail the

contemporary landscape of public housing, specifically how redevelopment of mid-century projects is occurring and how design ethos has changed since then.

There is a wealth of existing literature and research that examines the effects of housing design on residents - encapsulating both positive and negative attributes. The effect of design on factors like socialization and sense of belonging is more complex, compared to the rather straight-forward studies conducted on design, health, or safety. Within the latter, there is a clear correlation between, for example, more access to light, greenery with better mental health, but these connections are not as straightforward when it comes to socialization or sense of belonging. More recent analyses of public housing cites that almost all aspects of design, such as existing neighborhood amenities, materials, architectural style, and recreational areas all have the potential to also impact resident socialization (Muhammad, 2015).

Socialization & Sense of Belonging

Existing literature has proved many connections between design elements in housing and their effect on the level of social interaction between residents. Design that promotes spatially close interactions between residents as opposed to design in suburbs where residents are separated by cul-desacs, long roads, and single family homes seem to obviously create higher rates of socialization (Wood et al., 2010). Comparatively, public and open spaces with access to nature allow for more social activities, and dense networks of sidewalks, streets, and "semi-private outdoor spaces" like patios and front lawns all increase the chance of social contact between residents (Abass et al., 2019). However, research suggests that factors such as the length of time that residents have lived in an area, as well as the age of relationships between residents are much stronger predictors of high levels of socialization compared to "properly" designed neighborhoods with much newer residents. In a 2009 study in a Boston housing project, older residents were more willing to do favors for another even though they lived in a space with poor access to utility and lacked safe public spaces to access (Tach, 2009).

Vegetation and other beautification initiatives have also been proven to increase a connection to places experienced by residents; the two most important factors in this connection are both the physical environment and existing relationships with other residents (Yousefi et al., 2017). For example, a study in Berlin, Germany found that many respondents noted that they felt a sense of attachment to the greenery outside their house (Säumel et al., 2021). Design alone does not create an area with strong attachments - a sense of belonging seems to be most strongly fostered by areas where other people are interacted with. These "third places," or locations that are not the home or work, include parks, playgrounds, restaurants, plazas, any informal location where human connection is available (Zouras, 2020). Superficial aesthetics or green beautification can only go so far in fostering a sense of belonging - authentic human connections are still the most vital component.

Health (Physical & Mental)

Additionally, existing literature suggests the connection between elements of housing design such as open spaces, light, and greenery are fairly straightforward. Access to vegetation and greenery has been proven to reduce stress (Schantz, 2022). From a physical health standpoint, greenery, especially in low-albedo, urban centers, have been shown to lower temperature as well as reduce harmful air particulates (Weber, 2014). Finally, there are many connections between adequate light and levels of crime, as seemingly well-lit areas deter crime (Rijswijk & Haans, 2018). A lack of exposure to sunlight and a dependence upon ultraviolet lighting sources can weaken the body's ability to process calcium and has also been linked to higher rates of melanoma (Jackson, 2003).

Safety

Some of the most cited factors of design that affected residents' perception of safety include the presence of defensible space (the level of personal responsibility one feels towards their residency),

availability of private and public spaces, as well as the presence of other people in public (Beck 2019; Evans, 2003; Brown et al., 2009). Jane Jacobs famously wrote about how the presence of "eyes on the street" in crowded public places could psychologically make people feel safer but also literally, as studies have shown that a pedestrian density up to a point can deter crime (Tchinda & Kim, 2020). Related to creating a sense of belonging, the production of "defensible space," or space a resident feels comfortable and safe in, is also very important in building design. These spaces can be defined as areas delineated from open space so people are able to exercise agency over their built environment and feel some degree of control (Beck, 2019). This can be achieved through increased access to: public spaces that can be surveyed or where residents can look out from, adequate lighting, communal paths through residential areas, and homes that face one another (Newman, 1973). Like with socialization, a combination of physical design features as well as interactions with other residents are necessary to make residents feel secure in their housing environment.

Public Housing Design & Isolation

The intrinsically isolating nature of multi-story, compartmentalized buildings have been linked to negative effects on mental health. One study conducted in high-rises in Auckland found that residents felt both constrained by the literal size of their living quarters, but also felt they lacked locations that offered recreation (Chile et al., 2014). Interior design of projects only worsened matters. In Pruitt-Igoe, for example, elevators would often skip floors, effectively robbing residents a chance of meeting others when traveling to their floor, and the long interior galleries from which rooms were accessible from did not provide an adequate place to socialize (Comiero, 1981). Additionally, "towers in the park" were often considerable distances away from social hubs, robust downtowns, or public transportation nodes, locking residents out of access to civic and public life. Finally, utilities and maintenance in housing projects of the 1950s to 1970s were renowned for their routine failure. Many did not take into account the presence of young children in the apartments who stressed interior infrastructure and also oftentimes lacked

recreational facilities. Furthermore, the diminishing tax base of residents meant repairs for the elevators or washing machines were often neglected (Hendrix, 2021.) The combination of unique design choices, a concentration of youth, and constant maintenance issues all served to exacerbate the degradation of the public housing project. To many, Pruitt-Igoe and other projects from this time period established a permanent social stigma against the government-funded public housing projects (Comiero, 1981).

Given the distressed and dangerous nature of these housing projects, many residents felt that their needs were not adequately met, resulting in the formation of community groups. These groups worked to both support other residents financially and socially, but also advocated for themselves politically to preserve their homes and call for benefits.

Tenant Organizing

Residents of these homes initially enjoyed the technological advances and amenities of the homes, but those feelings soon soured when the government failed to provide maintenance as both public and economic support waned (Stoloff, 2004). Depending on the housing demographic, residents had different wants. Obviously due to long-term degradation and disinvestment many residents wanted amenities to be repaired and working. Although there is a lack in literature specifically documenting resident's of the original mid-century project's needs, some data is still available. At its core, many residents simply wanted homes that were constructed nicely, clean, and well-managed, and this expectation was met initially in many public housing projects before issues like increased costs gradually degraded them (Levinstein 2015, 224). Women and families, for example, petitioned for low-to-the-ground, "bungalow" style homes, complete with childcare centers and other supportive services whereas

many workers preferred homes with an aesthetic flair, including "brickwork" and design that "appreciate artisanal skill" (Wright 2014, 73).

Despite the poor design of these projects, many first-hand accounts of tenants who lived in these structures speak of how residents were able to mobilize successfully to address these problems themselves. For example, in the Robert Taylor Homes, many children were forced to play in elevator shafts due to a lack of recreational space, often getting hurt or in trouble. Consequently, families formed organizations like the Mama's Mafia to babysit and provide counsel for one another (Venkatesh, 2000). This story of historically disenfranchised communities coming together to empower themselves and take action has also played out in other projects, like Chicago's Wentworth Gardens. In this project, women activists organized to prevent their public housing units from being razed and turned into a baseball stadium, not yielding to the bureaucrats who viewed their homes as blighted projects, not worthy of saving (Feldmen & Stall, 2004). Case studies like Singapore have proven that it is not necessarily design that prevents strong communities from forming - poor policy and planning that exacerbate racial enclaves and wealth disparity do the most damage (Teo & Huang, 196). Despite the destitute housing conditions and sociopolitical movements that only served to disenfranchise public housing residents, many communities were able to create better living conditions for themselves and their family.

Ultimately, there are two leading trends research has established that can be attributed to the downfall and stigmatization of mid-century public housing projects in America. On the design side, the aforementioned neglect of amenities, isolating nature of the high-rise, modernist concrete aesthetics, and disconnect from the surrounding city all served to further disenfranchise residents and send their built environment into further disrepair. These failures were also compounded by poor policy that prevented low-income, primarily people of color from the benefits of generational wealth and financial advantages.

It is also important to note that not all public housing is globally reflected in the US experience - many countries have created thriving public housing systems that have not been plagued by endemic issues in the United States like racial inequality and enclaves, lack of funding, and undesirable built environments.

Success of Public Housing Abroad

Despite failed projects in the United States, public housing overseas has enjoyed enormous success, proving it is possible to enjoy safe, well-designed, and clean affordable housing - mixed-income housing or voucher systems need not be the only panacea to the mid-century disasters in the US. The case studies of Singapore and Austria prove that public housing can utilize human-centric design and equitable socio-economic policy to create quality and livable homes for residents.

Design Elements



Figure 3. Public housing in Singapore in the older estate of Yuhua.

Many of the public housing apartments in Singapore utilize the "International style" associated with failed American projects - evoking the concrete high rises of modernism design. Despite the negative stigma of these projects in the US, in Singapore, blocks of concrete housing have proven to be a successful architectural and design choice for a number of reasons. Singaporean high-rise developments have an abundance of green spaces in the form of green "walls," parking lot gardens, and community gardens, providing adequate coverage. More importantly, the high-rises are integrated into surrounding nexuses of transportation as well as malls, food courts, and public parks, which are even attached to the developments, all part of a master plan for each housing complex to function as a self-sufficient ecosystem (Goh 2014, 3).



Figure 4. A traditional Austrian courtyard in Vienna's Favoriten district (Politico, 2022).

As the example of public housing in Singapore demonstrated a need for government intervention in order to create strong projects, the same can also be seen in places like Vienna, Austria. Public housing projects in Vienna also are lived in by much of the population, around 60%, and are inhabited by people of various incomes, directly addressing the problem of enclaves (Schweizter, 2020). Furthermore, human-centric design is also emphasized in Vienna. The trifecta of "light, sun, and air" along with transportation and recreational spaces were emphasized in the creation in many of these public housing projects in the 1930s (Pelleteret, 2021). The main difference in public housing design between the two countries is the lack of verticality in Austrian projects but also the emphasis on the presence of the "Hof" or courtyard. The well-gardened courtyard provides adequate light and greenery, but also functions as a central meeting place for residents, almost defined as an "outdoor living room" (Porotto, 2016).

Public Housing is Not a Proxy for Segregation

The majority of Singapore's population (around 80% in 1985) live in Housing Development Board apartments encompassing varying types of ethnicity and socioeconomic levels (Housing & Development Board, 2020). Additionally, ethnic enclaves are broken up through the 1989 Ethnic Integration Policy which mandates racial limits of ethnic groups (Yap, 2022). Granted, there are some problems with this system of ethnic quotas. Within Singapore's ethnic demographic, the vast majority, around 75%, are Malay, compared to the minority populations of Indian and Chinese residents. This can pose problems, especially with the Malay population who are limited to only making 20% of any housing estate, who may feel discouraged from forming strong communities, especially with their Muslim cohorts (Chua 1991, 348). Despite this failure in producing completely assimilated public housing projects, Singapore has proved public housing can function without producing projects that are relegated to the poorest and more marginalized groups within society.

However, although design elements from Singapore and Vienna can be applied to the United States, it is important to note the ripe conditions that lead to the country's success with public housing. Public housing developments in Singapore and the United States reflect the norms of each country both politically and socially. This combination of government policy to address issues of class and race disparity along with robust planning to foster community and sense of place were both factors that were severely lacking in modern American public housing. Given that the majority of Singaporean residents live in public housing, it is logical that the government provided the necessary support and planning.

Redevelopment of Public Housing in America

Most public housing redevelopment nowadays is done through either the Choice Neighborhoods Initiative, facilitated through Rental Assistance Demonstration (RAD) which enables funding and the leveraging of private equity to pay for the redevelopment of distressed housing projects (The Urban Institute, 2013). The HOPE VI program prioritizes the redevelopment of housing that is the most dilapidated or "severely distressed" and provides grants to housing agencies to fund the construction (Tach & Emory, 2017). HOPE VI revitalization grants are funded through HUD which has awarded \$4.5 billion to HOPE VI from 1993 to 2001 (Popkin, 2002). The Choice Neighborhood Initiative program is another created to rebuild or replace public housing projects like HOPE VI, yet with additional intent of creating connections with the community and neighborhood that surrounds the redeveloped project (The Urban Institute 2013, 1). One example of this revitalization include the Baychester Homes in the Bronx which have been upholstered with modern amenities and infrastructure through RAD. The Homes were created in the 1990s, but quality of utilities gradually degraded; this new revitalization modernized hallways, window sealing, apartment lobbies, and building facades. Furthermore, new spaces of socialization have been added in the form of a revitalized community center, garden plots, and a public plaza. Furthermore, redevelopment often goes beyond just upgrading existing structures, oftentimes there are extensive additions to public housing projects (Kimmleman, 2021). However, other scholars have posited that even though many design improvements have been made, the systemic underpinnings that contributed to the downfall of public housing in the 1950s and 1960s are still being continued. Resident participation in development of projects is lacking, even with provisions in HOPE VI; HUD criteria dictates that resident involvement is taken into account along with business, developers, and government opinions too, instead of given its own separate criteria (Keating, 2000). Furthermore, It is essential that

projects are not left isolated and stranded from economic centers and businesses or means to further economic mobility such as transportation services (Popkin et al., 2004). Ultimately, design can only rejuvenate public housing to a degree, the undercurrents of social and economic policy also need to be contributing to the wellbeing of inhabitants and consequently their ability to form strong communities.

Overall there is a marked gap in the amount of evidence, in particular to public housing design, and how residents interact with these specific design choices and amenities. Despite this, the wealth of literature relating to certain types of housing design, the failures and misuse of historic housing public projects, all point to a need to reprioritize design that actually serves its residents, especially regarding architectural and design choices that enhance socialization, safety and health, and a sense of belonging. My research looks to examine if the necessary changes in building design are being implemented in order to create communities that are safe, healthy, and not isolated from their surrounding amenities. Redevelopment done correctly should provide residents with quality homes and create environments that will connect, not isolate communities from their surroundings.

The following are the three case studies of public housing projects in California that serve as examples of projects that are either undeveloped, redeveloped, or ongoing redevelopment. My research question ultimately serves to investigate how redeveloped public housing projects implement building design in a resident-centric manner through both architectural design as well as the implementation of certain facilities, compared to the mid-century housing projects of the past which did not necessarily meet all of their residents' requirements.

Estrada Courts (Figure 1) was originally constructed in 1942 to house defense workers and low-income families and featured 30 buildings. The homes were built according to the principles of the "garden city," a hallmark of modernist planning (Los Angeles Conservancy, 2022). The courts are owned by the Housing Authority of Los Angeles and the original architects include Robert Alexander, Fred

Barlow Jr., David J. Witmer & Loyall F. Watson, Paul Robinson Hunter, Winchton L. Risley, and landscape architect Hammond Sadler (Los Angeles Conservancy). Although I was unable to find the exact financial mechanism behind the construction of the homes, given they were constructed in 1942, it is not unreasonable to assume funding was provided under the original 1937 housing act, and the construction process was facilitated by HACLA.



Figure 5. Photograph of Estrada Courts' construction process in the early 1940s.

The homes of Hunter's View (Figure 2) were originally constructed in 1956 and contained 267 units off of Bayview-Hunter's Point in San Francisco. The redevelopment, which finished Phase I in 2013 and Phase II in 2018, followed the guidelines of the HOPE SF program as well as the principles of New Urbanism (Hunter's View, 2022). The development was led by the San Francisco Housing Authority, developers like the John Stewart Group, Devine & Gong Inc., and the Ridge Point Non-Profit Housing

Corporation in conjunction with architectural firms such as Mithun, Paulett Taggart Architects, and the David Baker Architects (Hunters View Revitalization, 2021). The redevelopment altered the street grid of the neighborhood by adding new roads, parks, buildings, and homes and provided new facilities such as offices, childcare centers, and community centers (Hunter's View Revitalization, 2021). Much of the financing for the redevelopment was done through HOPE SF, LIHTC, bonds, proposition IC, federal and state institutions, among many others (Hunter's View Associates LP, 2010).



Figure 6. Hunter's View redevelopment, profile shot of the area's steep grades and hills.

Jordan Downs (Figure 3) is an ongoing redevelopment project in the neighborhood of Watts, Los Angeles. The homes were originally built in the 1940s for wartime workers and transformed into public housing in the 1950s (HACLA, 2022). This site is by far the largest and most extensive of the three, redeveloping the 700 existing housing units and adding around 800 new units.. Furthermore, the

development includes the construction of nine acres of parks, shopping centers, child care centers, and infrastructure (HACLA, 2022). Community development partners BRIDGE Housing, Primestor Inc., and the Michael Organization guided this community revitalization process. Given the newness of the redevelopment process, the Choice Neighborhoods Initiative was used to fund a large portion of the project; a \$30 million grant. Other sources of funding include a grant from the Transformative Climate Communities, HACLA, and other state and federal sources (HACLA, 2022).



Figure 7. Jordan Downs under redevelopment, new amenities like the school and track field can be seen.

Methods

In order to better understand how design choices in contemporary or revitalized public housing projects affect one's ability to create a strong community, I conducted a series of interviews with architects, planners, and developers involved in the construction of these projects. I originally wanted to have 3 categories of interviews based on the types of public housing projects I analyzed which included a non-redeveloped project (historically built in the 1940s-1960s), a project undergoing redevelopment, and

a project that has been redeveloped. As mentioned above these sites include Estrada Courts, Hunter's View, and Jordan Downs. However, I was not able to contact any of the design firms or developers involved in the construction of Estrada Courts. In the second part of my research collection, I also generated a criteria of design elements based on blueprints, observations, and interviews that will be applied to each project in order to analyze individual design features to see what factors of the built environment are being prioritized and how.

Criteria

When looking at design plans, I documented each factor of design that could influence the ability for residents to create strong community ties. These factors follow the principles of New Urbanism and include availability of places for residents to meet, utility availability, number of floors, amount of greenery, and connection to other surrounding nexuses for socializing. My criteria chart is based on a University of Minnesota guidebook for design in low-income housing, HCIDLA guidelines for housing, HOPE SF guidelines for public housing, and the Congress for New Urbanism's manifesto. From there, I applied this criteria to each of my site's design plans to see which design and planning elements were fulfilled on a five-step likert scale of "1 = never," "2 = rarely," "3 = sometimes," "4 = often," and "5= "always."

New Urbanist Public Housing Redevelopment Criteria

Delineation of	Connectivity	Greenery	Sense of	Open Space &
Public & Private			Belonging	Security
Spaces				
-Private but open	-Connections	-Landscaping	-Cohesive &	-Well lit, sense of
areas	between buildings,	among setbacks	well-defined	security
-Prevalence of	facilities, exterior	and alleyways	architectural	-Sense of openness
dividing elements	neighborhood	-Climate	styles,	vs enclosure
(hedges, internal	-Connections to	moderating	-setbacks,	
walls)	businesses,	vegetation	variation in	
-Building Height	transportation,resta	-Greenery that	height	
& Spacing	urants, services	occupy empty	-human-scaled	
		space	design choices	
			-variation in	
			facade depth &	
			length	

Study Instrument - Semi-Structured Interviews

For my case studies of Jordan Downs and Hunter's View I interviewed architects, developers, or planners that were directly involved in the design, financing, construction, or community engagement of these sites. With regards to Jordan Downs, I interviewed an architect from SVA Architects, a project manager and an associate project manager from the developing firm BRIDGE Housing, as well as the leader of developing firm Devine & Gong. I also talked to two partners/architects from Mithun, another architecture firm, who did work both on Hunter's View and Jordan Downs. Concerning Hunter's View, I interviewed an urban planner from SF Planning as well as an architect, urban designer, and principal from Mithun. The interviews were extensive in nature in order to parse out as many thoughts, opinions, and theories on how these new design elements and altered spaces affect residents. I utilized snowball sampling in order to recruit new interviewees by asking my participants if they recommended anyone else I should converse with.

Findings & Analysis

In order to better understand the design elements that are prioritized in contemporary redeveloped public housing, I interviewed a series of architects and designers, developers, and public housing experts.

Table 1: Interviewees List

Experts	Planner at SF PlanningPartner at Mithun
Architects	 Architect at SVA Architects Architect at Mithun Architect at Mithun
Developers	 President at Devine & Gong Associate Project Manager at BRIDGE Housing Project Manager at Bridge Housing

What do Hunter's View and Jordan Downs Prioritize?

Design Elements

The Hunter's View and Jordan Downs projects are case examples of contemporary redevelopments of legacy public housing projects. The most notable design elements within these contemporary redevelopments that the interviewees spoke about mainly center on the importance of communal spaces, general aesthetics, and a sense of continuity within the project. All of these elements overall reflect the values of these redevelopments as resident-centered projects, vastly different from their original mid-century counterparts, which prioritized saving money and cost-effectiveness at the expense of creating segregated, poverty-concentrated projects.

Multiple interviewees spoke about communal spaces as important hallmarks of these redevelopments. One architect with SVA Architects highlighted the importance in realizing the diversity of residents and their different needs within Jordan Downs - a vast difference from projects like Pruitt-Igoe which were not necessarily equipped with the capabilities to "childproof" amenities from the stresses of children (Comiero, 1981).

"There are big families living in these units. There's a lot of kids for example. So personally, I'm always trying to create more communal exterior spaces and things where people would like to, you know, hang out outside and talk." (Interviewee #2)

These communal spaces, such as community centers or recreation rooms, served not only children, but the community at large. These community spaces were also bolstered by the density the project afforded, as density grants "natural sort of abilities to kind of meet each other and have neighbors helping neighbors" (Interviewee #1). Other elements include windows and open corridors which allow for more daylight and open air. The same architect also acknowledged the need for "more areas where people

can interact with each other" and how as a result in Jordan Downs "within common areas [we] made nicer corridors" and there is an effort "to push for units that have balconies" (Interviewee #2).

Aesthetic sensibilities were also a priority to many interviewees. For example, in Hunter's View some residents were upset that they did not all get the best views, so a grid style plan turned out to be the best in affording these views (Interviewees #4, #5). In turn, some architects hoped that by creating aesthetically pleasing environments, residents would be more inclined to maintain them (Interviewee #2, Interviewee #3). Other interviewees highlighted the difficulty in doing so when children lived in a literal warzone, where safety overtook all other concerns (Interviewee #4, Interviewee #8).

Hunter's View, in accordance with the design language of HOPE SF, followed a design ethos which sought to integrate the project into the larger landscape of San Francisco. One planner at the San Francisco Planning Department stated: "And then you kind of had no real relationship between the buildings. Sunnyvale was a little bit different. But generally you had sort of these no man's land that that were just kind of occupied by, you know, random parking, and just no sense of who is taking care of what, and so part of what the intention was of these Hope SF projects was that you lay out the streets with sort of a more modern of configuration where the streets are" (Interviewee #3). Through the extension of paths through the buildings into the surrounding neighborhoods, Hunter's View was able to "flow" more seamlessly with its surrounding environment.

This effort to establish a sense of continuity throughout the redevelopment can also be seen in Jordan Downs. Architects specifically made an effort to limit three-story buildings among two and one-story single family ones, so the scales of the buildings do not dwarf one another in order to "respect the context" of the site design (Interviewee #2). This notion of scale was also reiterated by another partner from Mithun, that buildings in these redevelopments should not only consider the space from room to room, but from room to building, and from the building to the outside world (Interviewee #8).

Contemporary Design Language

The contemporary leading design ethos of these projects is primarily rooted within New Urbanism. Some of these tenets I encountered in the interviews were cohesive aesthetic elements within neighborhoods, connection to surrounding neighborhoods and amenities, and a human-centered approach to the built environment.

"Well, I think it just kind of makes it look more like a jail. It feels more "jail-like" when you have steel bars. You know there's measures to it's not, you know, just because you're redeveloping a new building in a new area that's not very safe doesn't solve crime. Just by, for example, building buildings without steel bars on their windows and providing more, you know, security cameras - there's other ways to get a sense of security..." (Interviewee #2).

Commentary on design elements that were left out of the redevelopment reinforces the idea that the redevelopment teams viewed some features encouraged or were conducive to negative behavior. "Most dangerous of all to public housing- one way streets, there was a lot of drug dealing" (Interviewee #6). However, design that encourages community and the public viewing of other residents, especially in Hunter's View, could potentially combat these negative impacts by fostering a more vibrant sense of community.

"I wanted to tie [Hunter's View] back into the street grid of the surrounding neighborhoods because they were so different and so jarringly different in appearance and upkeep that you really did get the appearance that they were for a different population" (Interviewee #3).

Additionally, an interviewee commented on the negative side effects of density - how in midcentury projects there was a tendency to cram as many people as possible within homes without
considering concerns of residents, resulting in a horrible built environment (Interviewee #8). However,
other interviewees like a developer from Devine & Gong posited that density could also be a key factor in
developing neighborhoods under the guiding ethos of New Urbanism. Density, when properly applied,
can bolster qualities of camaraderie and impromptu connections, similar to the Jacobsian idea of "eyes on
the street." Apparent in the design language of both Jordan Downs and Hunter's View was a sense of
incorporation of the projects into the surrounding environment.

One interviewee also touched upon general design trends in redevelopments not just unique to Jordan Downs or Hunter's View. "There's a big focus on things like landscaping, edible foods and so like, make sure you like having fruit trees, and also herb gardens, sometimes like outdoor kind of grilling areas, is something that you'll see a lot. You're starting to see a push for units to have balconies" (Interviewee #7). These factors demonstrate a shift towards truly making these developments resident-centric, allowing for small amenities that not only increase quality of life and aesthetics, but also allow for more impromptu meeting spaces for community-building.

Community Involvement & Concerns

Safety

The issue of security and feeling safe within a built environment is a prominent concern for many of the residents, based on my interviews. One interviewee spoke in depth about the horrible conditions of the temporary shacks that were originally constructed in the Hunter's View above the shipyard in San Francisco, where the drug trade was the only viable economy and gang violence was rampant (Interviewee #8). The cause of this general degradation can be linked back to defunding efforts, for example, HUD defunding in the other public housing site of Plaza East also led to squalid, unsafe conditions (Interviewee #4).

"If you move me over there, my kid will be shot" (Interviewee #5).

Furthermore, many local neighborhoods had rival gangs which posed problems if residents were to be relocated during the redevelopment process. An architect at Mithun consequently shared that their "whole plan was geared around phase redevelopment...in phase 1 we were able to move everyone out and anyone who didn't want to move off site didn't want to...[everyone] moved back in when we did the first few buildings..." The care demonstrated in both Jordan Downs and Hunter's View around resident

concerns for their families safety emphasizes the human-centered approach taken by the developers, architects, and planners throughout the entire process. (Interviewee #5)

Additionally, many residents were clear that they wanted some degree of privacy given the nature of the building design. Given the fact that many families live in these homes, and the multitude of phases in Jordan Downs, residents were concerned about the constant influx of people moving in and out the site (Interviewee #6).

Desirable Design Units

Throughout the interviews, there were many elements that residents prioritized or pushed for, both in the exterior and interior of the redevelopments. Design elements withstanding, one interviewee shared their experience when discussing the redevelopment scheme - residents want to know the basics - how big the dining room is, or if there are washing machines (Interviewee #8). The same held true for Jordan's Down. "One of the things that the tenants in the 6 and 8 housing really want are in-unit washer dryers. It's a huge thing for them. Another thing is having more kitchen, storage and pantries. So we try to incorporate that into our design as much as possible." (Interviewee #2) In both redevelopments, concerns were focused more around internal amenities as opposed to external amenities, things like "unit layout, in terms of access to laundry, and so forth" (Interviewee #3).

Despite the focus on modern amenities, there is also a demand for specific exterior design elements that affect the way a resident would interact with the surrounding neighborhood or with other residents outside of their homes. In the following quote, when talking with the redevelopment team, residents wanted homes that were not similar to the Jordan Downs of old, recognizable barrack-like concrete slabs.

"Residents made it clear; no towers. So we created mid-blocks for residents, [and] outer blocks for streets/parks" (Interviewee #4).

Other concerns seem to be more about places where one could safely gather or meet with others outdoors. A planner shared his vision to make "stoops as large as possible, so they're actually occupiable" and after the homes of Hunter's View were finished, "...[he] noticed that they are occupiable, that people have seats in there, and they're kind of hanging out, so that's been kind of heartening" (Interviewee #3). This could also symbolize the distrust and other uses of public spaces like indoor stairwells or meeting rooms as places that were unsafe or associated with crime. For example, in the related redevelopment of Plaza East, many residents did not want elevators within tall tower buildings out of fear for safety within corridors, so podium levels with their own front doors were installed instead (Interviewee #5).

Non-Profits & Resident Input

Communities within Jordan Downs and Hunter's View had many concerns such as the aforementioned issue of safety but also stemmed from a general sense of mistrust with the housing authorities. This mistrust can be mitigated both through extensive community meetings with the redevelopment team but also through non-profits that can convey resident opinion.

"In phase I we only took down 4 buildings or 12 units so we were able to accommodate people on site, residents don't trust what's happening. [They thought] there's a pretext here that's gonna force me into a worse situation, so HACLA did a ton of work to regain resident trust" (Interviewee #4).

The involvement of non-profit organizations is crucial in communicating the needs and desires of the residents. Particularly in Hunter's View one Partner from Mithun detailed how non-profits indeed "are better at keeping track of them, operating and maintaining [housing projects]" compared to the overburdened federal bodies that did before (Interviewee #3).

The same held true for Jordan Downs, as in interviews with BRIDGE Housing project managers, they revealed that there is always extensive meetings both with the wider community but also specific residents to inform the entire redevelopment process (Interviewee #4, Interviewee #5).

One leader at Devine & Gong, a development firm, spoke on the guiding force of financing that guarantees developments can only be continued when resident involvement is ensured. They informed me that "for public subsidies and public finance, especially around bonds and tax credits and actually federal funding like a project base Section 8, they're very clear guidelines about the type of community process you have to undertake...there's a whole permitting planning department that also is very clear about CEQA and entitlement" (Interviewee #1). In this manner, non-profit consultants then work with the community to ensure that these financing goals are met but also residents' are able to ensure their needs are fulfilled.

Barriers to Redevelopments

Costs

Many of the developers and experts I interviewed, especially in the case of Hunter's View, mentioned financing as one of the biggest barriers both to the redevelopments in general but also specifically to certain design elements. As one developer shared, "Hunter's View [issue] was financing, yeah, financing, because there were a lot of environmental issues. So we needed to really clean up the land, and so we needed to get federal money to clean up the land... I started doing Hunter's View in 2005,17 years... We have probably another 8 years to go to finish it out, so I will have worked on this

project for 25 years. Not very many people will stick to a project for 25 years" (Interviewee #1). As a result, strategies like implementing market-rate homes into these projects to pay for infrastructure costs and utility upgrades has helped alleviate some of these financial pressures (Interviewee #3). The competition and effort to attain adequate funding has stymied many projects, as well as the costs that arise at every step, such as from additional review requests.

"There is just so much pressure for us to approve as many units as possible." (Interviewee #3)

Additionally, the costs of materials, building, and construction has increased drastically, primarily from supply-chain issues as well as economic conditions like recession and inflation (Bergeron, 2022). One project manager that worked on Jordan Downs noted the skyrocketing prices of development and building. "I think almost every developer has been kind of in panic mode over the last year and a half, 2 years, just for cost escalation. We've been saying Post Covid, trying to keep a handle on this cost." (Interviewee #7). These costs can sometimes be passed on to residents, who may want amenities such as parking or in-unit laundry, yet these prohibitive costs can prevent these elements from being installed.

Although for good reason, the scoring system of how money is awarded can also potentially hamper redevelopment timelines, depending on California LIHTC scoring systems' preference for sites with higher density and connections to amenities. A project manager that worked on Jordan Downs emphasized how "...with development and with new projects and how projects are awarded funding from the State level, it's a whole nuanced scoring system and you really have to be located near a transit site or places with lots of amenities, so that residents can access them within walking distance. There's all these conditions that projects have to meet in order to get funding" (Interviewee #6). Although this process ensures residents have access to specific amenities, it can also hike up costs and limit access to funding for private developers. Ultimately, while this may not have been an issue for popular, historic projects like Hunter's View or Jordan Downs, smaller public housing projects in need of redevelopment without

extensive revitalization packages that promise economic investment, are not as historic, may not receive the same financial benefits.

External Pressures

The onus of the development ultimately falls upon who owns the land. One leader at a development firm posited that whoever owns the land, or has the right to finance it ultimately decides what type of vision is executed. Jordan Downs, for example, as one project manager put it, is "in the city's land. It really is kind to some degree know the city usually has the right to those development agreements, they get a final say on it" (Interviewee #7).

"So the types of things that were often kind of fighting with them are how much does the building step along the street, so you kind of get that nice rhythm because it's much cheaper just to do a floor plate across the entire site. And then, you know, just the rhythm of the entries because again... that's really hard for them, because when you put an entry you know, against the street, it just makes some of the functional space of the units more difficult to program" (Interviewee #3).

Another pressure that arose is the push to view the project of Jordan Downs not as seven individual ones but as one "mega project" with a cohesive community. As a result, this process, in the words of a project manager, "...adds on like a lot more nuances, kinds of challenges and things that you know you have to tackle, you know one project at a time, and then moving on to the next. It's like you're developing 7 at one time, so that makes it just a little bit more difficult (Interviewee #7). At the same time, many of the interviewees were hopeful that views of public housing and redevelopments were shifting for the better. Both project managers at BRIDGE saw "an increasing awareness and willingness to kind of tackle all of the hurdles when it comes to affordable housing" (Interviewee #6, Interviewee

#7). They viewed efforts like when Mayor Bass declared a state of emergency regarding the homeless crisis within Los Angeles as a boon, as it sped up the process of permitting residences.

Design Evaluation Tables

I created a design criteria as the second part of my analysis tools, aside from the interviews. The following three case studies were evaluated with my criteria based on the leading principles of new urbanism and human-centered design as shown in my methods section. I rated each design element on a likert scale of 1-5, signaling how prevalent or good-quality certain design elements were for each site. These tables were created to support my interviews, specifically analyzing the design side of each public housing project, rather than socioeconomic or policy-related issues.

Estrada Courts Plan

Although I was not able to secure any interviews with either inhabitants of Estrada Courts or people related to the construction and design of Estrada Courts, I was able to utilize a "HACLA Vision Plan" from 2017, which through community meetings and online polling documented community needs (Figure 1). The following data was taken from a Neighborland webpage for the HACLA Vision Plan for Estrada Courts. The "other" category included issues like music programs, more parks, new plumbing, computers, and markets for low-income seniors.

HACLA Estrada Courts Community Feedback Poll (2017)

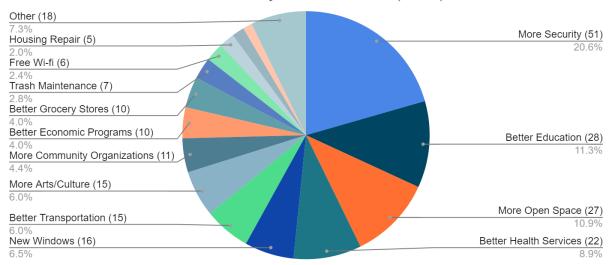


Figure 8: 2017 Estrada Courts Feedback Poll through HACLA. (2017)



Figure 9: The public housing of Estrada Courts shown in the highlighted section.

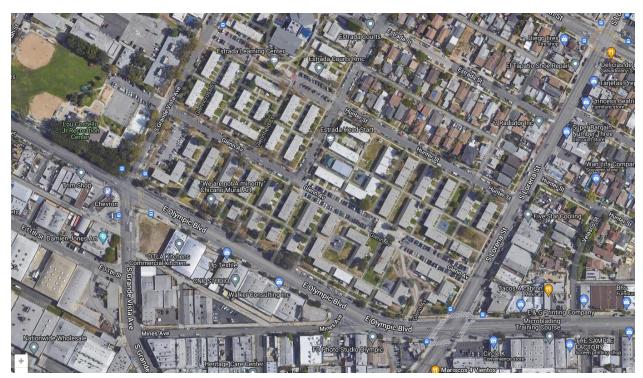


Figure 10: Estrada Courts and surrounding neighborhood of Boyle Heights.

It is important to note that I also utilized the building design guidelines of Jordan Downs and Hunter's View to inform my research here, whereas for Estrada Courts I only had access to imaging from Google Earth. As a result, I used both of these images, plus the Google Earth street-view to inform my evaluation tool.

Table 2: Estrada Courts Best Practices

Prevalence of dividing elements (hedges, internal walls)	Score: 2
Building Height & Spacing (low to mid height, lack of alleyways)	Score: 3
Connectivity (between buildings, residences)	Score: 4
Connectivity (to businesses, transportation, restaurants, services)	Score: 3.5
Landscaping (greenery among setbacks and alleyways)	Score: 2

Landscaping (greenery/elements that fill empty space)	Score: 3
Belonging (Cohesive & well-defined architectural styles)	Score: 3
Belonging (setbacks, variation in height/facade depth and length)	Score: 1
Belonging (human-scaled design choices)	Score: 3
Sense of openness, few enclosing spaces/structures	Score: 4
Well-lit, sense of security	Score: 3
Adequate amount of community spaces	Score: 3.5

Overall, Estrada Courts, according to my evaluation tool, scored the highest regarding factors such as a sense of connectivity between residents, a lack of enclosing structures, overall **greenery**, and a **sense of belonging**. The two-story buildings themselves are quite low to the ground, blending in cohesively with many of the other homes and buildings in Boyle Heights that surround the homes. Many are linked to one another or to the sidewalk with concrete paths that move through the fenced-off front yards in front of the homes. However, factors like adequate amounts of community spaces, variation in building sizes and designs, and **connections** to local amenities did not score as high. On the entire south side of the homes is industry and commercial buildings and up North runs the Golden State Freeway. Furthermore, the homes themselves are almost barrack-like in appearance, with bars over the windows, shallow facades, and hardly any setbacks or design elements to increase depth and visual noise between buildings. All of these factors contribute to a poor score in the **delineation of public & private spaces**, given the discrete, separate location of the buildings, and poor interspersement of other facilities or building typologies. Despite the lack of some of these tenets of New Urbanism, there exists a unique sense of community within Estrada Courts in the form of the tradition of mural painting, a factor not present within the recent and on-going redevelopments of Jordan Downs and Hunter's View. These

murals were created in the 1970s by resident Charles "Gato" Felix with other muralists and youth from the neighborhood, reflecting the distinct Chicano culture of Estrada Courts (Kim 2015, 53).

There are plans to redevelop parts of Estrada Courts. In 2022, Jimmy Gomez, the representative for California's 34th congressional district, requested nearly \$1 million to redevelop Estrada Courts. In particular, the letter documenting this sought to upgrade 185 units, add parking spaces, and improve the community center (Gomez 2022). However, these plans cannot be taken into account in the design matrix until they are added.

Hunter's View Plan



Figure 11: Map of Hunter's View Redevelopment Plan.



Figure 12: Hunter's View Courtyard Rendering of an example apartment block and courtyard.

Table 3: Hunter's View Best Practices

Prevalence of dividing elements (hedges, internal walls)	Score: 5
Building Height & Spacing (low to mid height, lack of alleyways)	Score: 4
Connectivity (between buildings, residencies)	Score: 5
Connectivity (to businesses, transportation, restaurants, services)	Score: 4
Landscaping (greenery among setbacks and alleyways)	Score: 5
Landscaping (greenery/elements that fill empty space)	Score: 5
Belonging (Cohesive & well-defined architectural styles)	Score: 4
Belonging (setbacks, variation in height/facade depth and length)	Score: 5
Belonging (human-scaled design choices)	Score: 5
Sense of openness, few enclosing spaces/structures	Score: 4
Well-lit, sense of security	Score: 5
Adequate amount of community spaces	Score: 5

Overall, Hunter's View, according to my evaluation tool, did exceptionally well in integrating green spaces and public spaces with residential ones, a process mediated through the implementation of large stoops, porches, and tree-lined corridors. Specifically, **greenery** is not only placed around each courtyard-like block, but also inside, as well as inside the Promontory and Panhandle Parks (Hunters View Community Partners 2008, 68). Green roofs are also present on many of the buildings to aid with water retention. Setbacks, and a sense of space between residencies, amenities, and public spaces both gave people a sense of privacy but also opportunities to meet others. There is a sense of enclosure within some of the courtyard spaces, yet I think that is offset by the variance in building height, abundant

greenery, and changes in slope which also function to **delineate private and public spaces** but also provide variation within the built environment.

In the interests of **connectivity** there is a need to situate transit near the homes, given the placement of Hunter's View at the very edge of the transit-dense city core - according to surveys with residents around 51% reported having to drive to work compared (Goyal & Pierce-Jenkins 2023). Despite a lack of public transit, there is now increased parking and bike parking, especially around many of the central parks. Furthermore, inside the redevelopment there are increased amounts of wider, well-lit, greenery-lined sidewalks and connectors. The redevelopment process, however, has outlined several sites within the complex to be designated for commercial stores, and the land outside, excluding inaccessible coast, is also primed for further development in the future.

This site in particular was redeveloped in accordance with design principles very specific to the hilly grid of San Francisco. As a result, my evaluation tool is also informed with specific diagrams and charts from this design manual designed by Hunters View community partners in accordance with WRT Design. In particular, these specific principles include a grid system which buildings align with, small building fronts that face streets, continuous buildings along streets, robust park systems on hilltops, and connective corridors of stairs and streetways to the surrounding neighborhood (Hunters View Community Partners 2008, 15). With regard to unique design aesthetics, the redevelopment process also prioritizes wrought iron decoration, an absence of blank facades, planters and projecting awnings. These changes in my opinion helped solidify and foster an increased sense of community, safety, and belonging - in congruence with one interviewee also stated that in particular they saw the stoops and porches of these redeveloped areas in constant use (Interviewee #3). Furthermore, integrating Hunter's View with the surrounding neighborhood was an extremely prominent feature in the redevelopment.

Jordan Downs Plan

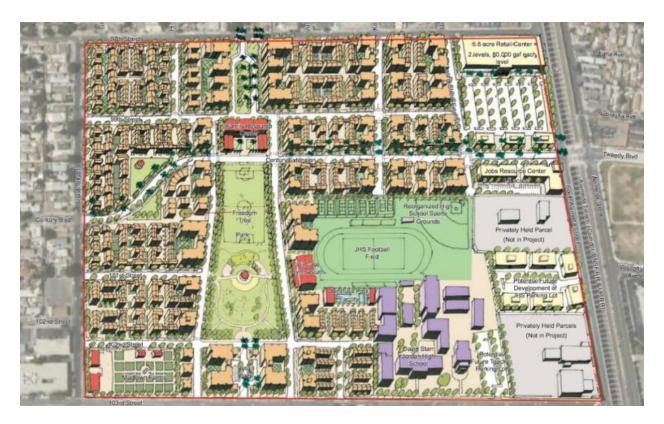


Figure 13: Entire Plan of Jordan Downs

Table 2: Jordan Downs Best Practices

Prevalence of dividing elements (hedges, internal walls)	Score: 5
Building Height & Spacing (low to mid height, lack of alleyways)	Score: 5
Connectivity (between buildings, residencies)	Score: 5
Connectivity (to businesses, transportation, restaurants, services)	Score: 5
Landscaping (greenery among setbacks and alleyways)	Score: 5
Landscaping (greenery/elements that fill empty space)	Score: 5

Belonging (cohesive & well-defined architectural styles)	Score: 5
Belonging (setbacks, variation in height/facade depth and length)	Score: 5
Belonging (human-scaled design choices)	Score: 5
Sense of openness, few enclosing spaces/structures	Score: 4
Well-lit, sense of security	Score: 5
Adequate amount of community spaces	Score: 5

Overall, within Jordan Downs there is a great diversity in building height and style. For example, in one urban village there are building heights with maximum heights ranging from 20 feet to 75 feet creating diverse building typologies (Jordan Downs Urban Village Specific Plan). Furthermore, each urban village operates as its own contained cell, yet is connected to nearby amenities like community centers or retail centers. The architecture itself is extremely distinct, with a loosely mediterranean influence, accessible at ground level, and with entrances that face the oncoming streets, a detail influential in creating a unique sense of **community and belonging**. No matter the type of building, whether it be townhouse, courtyard homes, or flat apartments and mid-rise apartments, they all contain similar design elements (Jordan Downs Urban Village Specific Plan). Most notably these are recessed entryways, stoops, frequent entrances and in the apartments in particular, mixed-use ground floors and open courtyards. The redevelopment also includes a vast array of **greenery** and **open spaces**. This is exemplified in the production of paseos; passageways in the mid-rise blocks for pedestrians only, that are lined with abundant greenery, part of the larger vision to create a visually interesting environment with variation (Jordan Downs Urban Village Specific Plan).

In a sense, Jordan Downs almost seems like a microcosm of a larger, contained city. The presence of the sports field, wide boulevard-esque park with the "Freedom Tree" within it, and retail centers all stay true to the ethos of a redeveloped "urban village," that is both centered in its residents yet **connected** with the larger neighborhood around it. This is aided by proximity to planned transit routes of the local DASH bus as well as Metro, along with a connection of fragmented bike paths in and throughout Jordan Downs.

Discussion

Findings & Hypothesis Evaluation

Ultimately, interviews conducted with experts in the field along with analysis on certain project design elements is extremely revealing in the massive progress redeveloped housing projects have achieved compared to their original mid-century counterparts. Within this discussion section I compare my findings from my interviews and design analysis with my initial hypothesis, literature review, and overall expectations.

One area where responses deviated from my hypothesis was on the topic of specific building elements. I thought residents would have a clear preference for redeveloped homes yet a majority of resident responses focused on practical amenities such as in-unit laundry machines or parking spaces. I initially hypothesized residents would be more vocal about amenities such as recreational rooms and community centers, or against elements like peeling facades, lack of maintenance, or dysfunctional elevators. Many resident concerns also seemed to have to do more with aesthetics than pure pragmatism. For example, in the case of Hunter's View, the main impetus behind the design ethos of the redevelopment was to implement the neighborhood within the larger region and design style of San Francisco; a strict grid system, houses that contoured to the hills, and dense networks of alleys. Although certain elements of this San Francisco style no doubt aligned with many of the points expressed in New

Urbanism, the aesthetic and stylistic cohesion of the project was extremely important to the development team.

My initial research also overlooked the necessity of finances in determining these specific design elements. The changing financial structures that supported these housing developments, as documented in my literature review, were also apparent in my findings, as interviewees, especially developers and experts, preferred to speak more on how *finances* determined the quality of the built environment rather than certain design elements. It is also important to note the scale and amount of economic resources behind the more contemporary developments of Jordan Downs and Hunter's View. Jordan Downs alone cost around \$1 billion in the ongoing redevelopment process, also a testament to the combination of public and private investment, compared to the purely government funded Estrada courts. I also underestimated the strength and draw of the financial awarding system associated with LIHTC and other financial incentives awarded to developers when choosing a site to revitalize. The majority of my interviewees made it clear that whoever owned the land, such as the City of Los Angeles in the case of Jordan Downs, made the final decisions in what ultimately would unfold in the redevelopment.

Finally, I also expected there to be more discussion on the non-profits in particular that worked with communities. Many interviewees spoke about how these organizations facilitated communication between the residents and the development team, but I am still curious about the particularities in each case study. For example, how did these non-profits work in the cases of Jordan Downs and Hunter's View? It would be important to know how they pushed for certain features to be added or removed, if the redevelopment process could adversely affect residents, and ultimately how community input was delivered.

Findings & Literature Evaluation

The prevalent New Urbanist ideas in contemporary literature including ideas such as the 15 minute city, resident-centric design, sustainability, and Jane Jabcobs' conception of the neighborhood were all present within these developments, reaffirming the literature's argument that these new urbanist tenets are indeed there. That is not to say the non-redeveloped project of Estrada Courts is unable to exhibit these same New Urbanist characteristics - indeed my evaluation tool found that although the homes have remained undeveloped for close to a century, the original design was still able to exhibit ideas that fell in line with New Urbanist ones, such as interspersed greenery, connectivity between homes, and low-rise homes. Naturally Jordan Downs and Hunter's View, as seen in design plans and design guides, expressly reference these same tenets in intense detail and implementation. The idea of removing the stigma of public housing as either a den of concentrated poverty or homes of "last resort," through both beautification but also functional design choices also adheres to the current literature surrounding the future of public housing.

Furthermore in both my interviews and independent research I expected the respective sites of Jordan Downs and Hunter's View to be markedly different from another in their approach to public housing redevelopment, in part due to differences in housing authority, site, and age. Instead, I found that although certain design features such as architectural style and overarching design differed from one another, both the wants of residents and the stylistic view of the development team were in actuality quite similar. As mentioned above, Hunter's View emphasized the grid system of San Francisco which has many design elements specific to the region. Jordan Downs, which did not have as specific of a design typology still incorporated a quasi-Mediterranean, Californian, Southwest-revival aesthetic to imbue the homes with a sense of uniqueness and belonging. Also, although Jordan Downs was redeveloped as part

of the Choice Neighborhoods Initiative which prioritizes the revitalization of the larger neighborhood, Hunter's View's acute integration with the surrounding neighborhood is still prevalent. The incorporation of many non-profits, continuous design ethos, and realignment with the grid system all work together to create this sense of continuity.

Relatedly, my research findings highlight the success of these housing redevelopments compared to the voucher system, despite a clear shift in federal policy that emphasizes the voucher system over the past half-century. Although initiatives like the HUD Section 8 Voucher Program have acted as the federal government's main system, I feel this research establishes the benefits of redevelopments, especially when a project is revitalized in the context of its larger community and neighborhood. Granted, vouchers are a way to quickly and efficiently, through free-market solutions, provide housing opportunities to many lower-income people, especially compared to the costliness and time involved in redevelopment processes. To a larger extent, the inclusion of a range of households with different incomes is an added boon compared to voucher systems where this difference may be even more skewed and as a result less likely to achieve the benefits associated with mixed-income neighborhoods. It is also important to consider the value of increasing the existing supply of affordable housing rather than just supplementing the demand for units when considering California, and the United State's housing shortage as well as increased rents and poor market conditions (Turner 2003, 1).

Although my interviews were not able to directly ascertain any information about Estrada Courts and the residents' lived experiences, my site analysis allowed me to examine the overall design of the homes and contrast it with my literature on mid-century housing projects. Consequently, the existing strength of a community in older public-housing projects can be hard to measure just at face value, or just by looking at an environment's quality of design - direct interviews are necessary. For one, the relatively low-to-the-ground nature of Estrada courts, well-decorated front yards, and connective clothes lines, sidewalks, and exterior decor was very different from what I initially envisioned. In the literature

surrounding this topic, much of it painted these urban developments as monolithic, high-rise blocks, each separate from one another.

Finally, I also felt resident concerns about safety were also understated in the research surrounding the redevelopment process. Much of the existing literature centered on how dangerous public housing projects had become as a result of concentrated poverty and gang wars over project turf yet at the same time also historicized it as an issue of the past at times; as if housing projects now existed as derelict, unsafe areas that were slowly deteriorating. The stark reality is that in both the Hunter's View and Jordan Downs' homes, many residents were extremely wary of being moved in the redevelopment process as if they moved into a nearby housing block they knew rival gangs would kill their children - evidence that gang lifestyles and the horrific effects on communities within these redevelopments can and still are long-lasting. Furthermore, the issue of safety directly pertains to the ability of these communities to foster a sense of belonging and community within the built environment. This is also an important factor behind the implementation of the phased system in Jordan Downs and Hunter's View especially, which allowed for residents to still live on site through the ongoing redevelopment, a process which was lacking during the time of urban renewal. A critique of the HOPE VI system which sometimes did not allow for residents to return to their existing homes, this newer system supported one-to-one replacement of homes, and gave residents either the option to return or a housing voucher.

Recommendations

Design & Socioeconomic Factors

Human-centered design is only one part of ensuring residents are protected during the redevelopment process - policy should be enacted so community members also receive benefits from massive financial investment that comes with these redevelopment processes.

Ultimately, the impact of architecture and design can only impact residents' abilities to form strong communities and should not be used as a crutch to help alleviate the underlying problems associated with deeply ingrained socioeconomic factors. It is important to recognize that factors like a lack of investment, isolation from resources, and concentrations of poverty resulted in the poor condition of these public housing projects, factors that cannot be attributed to the actual modernist design of the homes. Despite this, design can still play a role in facilitating community development through architecture that follows principles of new urbanism and human-centered design.

Additionally, redeveloped homes in accordance with contemporary urban design principles are only one step of the way, there also needs to be protections for residents during the process of neighborhood revitalization. Ensuring the opinions of residents of these developments are taken into

consideration compared to the demands of businesses, surrounding neighborhoods, or bureaucrats is critical in maintaining a sense of agency for these communities. Furthermore, there should also be protections for residents, as revitalization processes can sometimes hurt the communities they are meant to help when outside investors take advantage of the revitalization, raising costs of living for the community at large. While residents living directly in the redevelopments may be protected from these rising costs and also receive the benefits of changing the built environment, local businesses and residents living outside the project might be priced out.

The issue of safety during the redevelopment process is one that affects projects across the United States, not just in California. Many residents during the Hunter's View and Jordan Downs redevelopment process expressed fear over being forced to move to areas with rival gangs, or were fearful that the redevelopment would cause prices to rise, forcing them from their own homes. As a result, safety should be ensured and housing should be replaced at a 1 to 1 scale in local residencies in a phased system and there should be protections in place that establish fixed rents for original residents.

Finally, as a recommendation to HUD, redevelopment processes should not only prioritize larger, billion dollar redevelopments that harness all the resources of equity investing and benefit from meeting the majority of LIHTC qualified allocation requirements. Smaller public housing projects, ones not located near areas with a propensity for investing or are not necessarily historic landmarks could also benefit from redevelopment. For example, as mentioned above, U.S. representative Jimmy Gomez asked for only around \$1 million to upgrade the homes, community center and facades. HUD and public housing authorities in general should also prioritize or give special concessions to these smaller developments that are not part of decade-long investment packages, yet still also need the same amenities and investment that larger projects receive.

Standardized Design Guidelines

Redeveloped housing projects should have standardized guidelines throughout the project.

Oftentimes the design guidelines of these redeveloped housing projects, like in Jordan Downs or Hunter's View, are done in accordance with city code. Even then, the guidelines themselves seem to vary based on input from the development team, their architects, and planners. If entities like HUD set minimum standards for factors such as dwelling units per acre, areas lacking density could benefit immensely from it. Non-specific controls, such as general themes of having a variety of architectural styles and building heights and typologies, would still fall within planning code guidelines yet leave it to designers and architects in conjunction with communities to have creative freedoms (BRIDGE Housing 2016, 69). Other examples include houses that face streets and corridors, a lack of gaps or breaks in the continuity of buildings along a block, ultimately functioning to create a lively and resident-centered built environment. Furthermore, a general promotion of New Urbanist ideals by HUD either as provision in the California Fair Housing Design Manual, or an incentive within tax credit allocation plans could also insure a standardization of these design guidelines within redevelopments.

Local Housing Authorities & Non-Profits

Continued and robust funding and support of local nonprofits that are involved in redevelopment processes.

Non-Profit organizations that have been working with these communities for decades, aside from residents, can best communicate the needs of many and channel their wants in the most effective manner. The advantages of local authorities overseeing development is they are more able to work with a more

focused team that is catered to the specific development at hand. Non-profits would know the exact needs and details of a community, such as their demographics, and local housing authorities would be able to dedicate more care and attention to these desires. Comparatively, one overarching federal housing authority simply lacks the time and resources for each individual community, resulting in the disasters of the mid-century.

Continued facilitation of local nonprofits and housing municipalities ensures there is a direct link between residents and housing authorities, allowing issues that arise to be addressed more effectively.

Financial Mechanisms

Grant financial allowances in the permitting and zoning processes of redeveloped areas to developers.

Cutting through the bureaucracy of the permitting and building process in California, especially Los Angeles would help to massively reduce the rising costs incurred through construction and permitting fees within these redevelopments. A streamlined process is also a more cost-effective one; a study on affordable housing developments in California found that design reviews or projects that received funding from a redevelopment agency added 5%-7% more to the cost per unit (California Department of Housing and Community Development, 2014). Consequently, amenities for public housing redevelopments or mixed-income homes to allow the expediency of permitting processes would save time and consequently money. An example of policy like this includes bills like AB 434. This recently signed bill in California will provide \$825.5 million in funding to build homes, yet does so by consolidating housing applications into one request and award process - streamlining the process of construction (State of California, 2023).

The provision of certain amenities such as parking has also proven to be extremely costly. In Los Angeles, for example, there are requirements that a certain amount of parking spaces must be provided per each dwelling unit, depending on the type, even if there are spaces in other nearby facilities or in public areas. However, parking is extremely expensive - In 2014, the average cost of a parking spot in a structure in Los Angeles was \$19,355 (Cudney 2014, 2). This impediment to development could be alleviated through the following recommendations. For one, situating projects near public transportation nodes could potentially reduce the amount of parking spots needed at these sites. Bus routes that pass directly next to the site, easily accessible rail stations, and adequate bike and electric scooter racks/stations could all reduce the need for parking spots. Additionally, policy in the forms of bills like AB 744 would reduce the mandated parking ratio to a maximum of 0.5 spaces per unit, if the project housed low-income residents (California Congress, 2015).

The navigation of the California Environmental Quality Act (CEQA) within California is a costly process which although is necessary to evaluate environmental impact of development, can add years to redevelopment processes, especially when weaponized by opponents of the developments. Policy that would loosen restrictions on high-density redevelopment projects such as these would decrease the amount of time it takes to get past permitting and construction, consequently saving money. At the same time, CEQA is essential to ensure already marginalized groups are not taken advantage of and exposed to adverse environmental risks - these high-density housing projects should both receive certain exemptions to streamline the construction process but also receive due environmental risk analysis. Consequently, amendments that would navigate within CEQA's rule, such as increasing funding for specific plans involving redevelopments, increase CEQA training to government entities so mistakes are not made, or simplifying litigation processes to either alleviate costs or time involved would not damage environmental protections (Smith-Heimer & Hitchcock 2018, 21).

Finally, more generally - an increase in funding across the nation would be extremely beneficial to the preservation and increased supply of public housing projects. Initiatives such as the ones outlined in President Biden's 2023 budget proposal to lower housing costs and increase access to affordable housing are a prime example of steps in the right direction. For example, this budget proposes an expansion of the LIHTC with regard to its internal requirements for increased flow of private capital, increased funding to revitalize households with more Project Based Rental Assistance (PRBA) contracts, and more grants to help communities remove barriers to development such as prohibitive zoning and permitting processes (The White House 2023).

Conclusion

Overall, there have been a great number of improvements and changes to the American public housing project since the 20th century that serve to actually acknowledge the needs and requests of residents. This process has been facilitated through an awareness of the failures of the past and through contemporary design, dedicated agencies, and robust financing, many previously blighted, dilapidated, and dangerous public housing projects have been improved immensely. Comparing the older Estrada Courts to the ongoing revitalizations of Jordan Downs and Hunter's View, the human-centric focus on the built environment as well as the well-being of residents is evident.

The built environment alone cannot sustain these improvements - resident input needs to be constantly monitored, especially for a group that has been ignored and disregarded for so long. Housing design is just one piece in ensuring low-income residents in these public housing projects are not taken advantage of - policy and community work must also function in tandem to create safe, livable communities.

In this study I hoped to examine how redeveloped housing projects are markedly different from their undeveloped counterparts, both in terms of design language and their ability to create strong communities. In order to do this, I took a two-part approach in my methodology which analyzed the undeveloped site of Estrada Courts, Hunters' View which had already been redeveloped, and Jordan Downs which is in the process of redevelopment. I first sought out interviews with developers, architects, and experts associated with these respective projects in order to glean information on design, resident opinion, and more. From there, I also analyzed the design plans and guides of these sites to compare the design elements and factors prioritized within these sites, comparing them to older, mid-century projects.

Overall, my findings centered around four distinct themes: distinct design elements, a contemporary design language utilized in these developments, community concerns and involvement, and barriers to the redevelopment process. With regard to design elements, the redeveloped projects made it clear that they were moving away from the separated, barrack-like towers of the past while also providing many amenities like parking or in-unit washers. These design choices were propelled by overarching themes of ensuring these homes were not jail-like or constructive while also implementing the tenets of New Urbanism. Additionally, I found that many residents were extremely concerned with safety, especially rival gangs, when moving as their homes underwent redevelopment. Finally, many interviewees expressed how difficult the path to obtain financing for these projects was and all of the challenges associated navigating through it. My design analysis which compared the three sites to one another also illuminated the key ways in which New Urbanist policies have been implemented compared to sites that have not. These include a variance in building typology and aesthetic, increased connectivity with surrounding amenities and neighborhoods, homes that face inwards towards common pathing and streeways, continuous and non-isolated street corridors, and more communal outdoor spaces such as stoops, balconies, and porches.

My policy recommendations included both general and California-specific proposals. Specific to California, I propose that there should be less restrictive permitting laws in the construction process, as these delays incur higher costs resulting in redevelopments that are smaller or transfer these budget cuts to residents in the removal of expensive design elements. Relatedly, I also propose that redevelopments receive CEQA amenities as this is an act that has been used by NIMBYists and opponents of developments to slow them down or remove them. More generally, I suggest that there should be standardized design guidelines so all projects benefit from design elements that are best at building strong communities. There should also be protections in place that ensure residents also receive the benefits of economic revitalization and are not harmed from price or rent increases. Finally, more generally I also recommend that there is an increase in funding and program expansions for redevelopment processes across the country.

The biggest limitation in this project was that I had to use experts, designers, and other development professionals as a proxy to gain insight into the understanding of residents living in these redevelopments instead of speaking to them directly. Furthermore, If I had spoken with non-profit representatives or community organizers I would have been better able to speak on resident representation within these redevelopments. This also fed into a problem I had with my interviews, as many of the interviewees belonged to a move technical background, so did not necessarily possess specific knowhow on how residents were involved in the redevelopment processes. Finally, I did not have access to the official plans for Estrada Courts or any of the developer organizations that constructed the homes at their conception.

In future iterations of these projects, there remains much to be seen on if residents will be prioritized in these revitalization processes, and if these promises hold true over the next century, yet these contemporary redevelopments are certainly a step in the right direction.

Appendix #1:

Interview Questions

Interviewer preamble & introductory questions:

- 0. Just to have it on record, do you consent to me recording this interview?
- 1. "Hello, thank you for speaking with me today and volunteering your time. The questions will be focused around building design, how design and architecture affects residents, and the role of design in redeveloped housing projects."
- 2. Please state your name.

- 3. What is the name of your organization?
- 4. What is your position at your organization?

Architects/Designers:

- 1. What types of buildings have you worked on?
- 2. How would you describe your role in working with these types of buildings? How would you describe your role in considering building design?
- 3. How can building design affect factors like resident mental/physical health, sense of belonging, and feelings of safety?
- 4. How is resident opinion accounted for in the redevelopment process?
- 5. What are the most important structures/facilities in public housing/multifamily housing design that allow for residents' socialization?
- 6. Are there any important/notable design elements from traditional mid century American public housing (for example: long, open-air corridors and stop skip elevators in many mid-century public housing projects) that have been kept or carried over into the design of redeveloped public housing projects? What do you think (design-wise) will really define contemporary redeveloped projects?
- 7. To what degree are factors like greenery, building height, open space, and aesthetics, considered in redevelopment/revitalization?
 - a. Do you think there is a leading design language/ethos guiding the redevelopment of these housing projects?
- 8. How is the separation of public and private space considered in redevelopments? (alain said driven by development/property management)
- 9. Are there any design elements you would add/remove in these redevelopments? Why?
 - a. What are the biggest challenges you have encountered in the redevelopment process both in implementing certain design choices but also on the financial/bureaucratic side?

Developers:

- 1. What types of buildings/projects have you worked on?
- 2. How would you describe your role in working with these types of buildings? How would you describe your role when considering building design?
- 3. How does the development of infrastructure, commercial zones, and public transportation affect the lived experience of residents in public housing compared to projects that are not near these nexuses?
- 4. What is considered when choosing existing public housing projects to redevelop?
- 5. Relatedly, what are the biggest challenges when redeveloping these projects?
- 6. When redeveloping these projects, what change in design, structure, etc. has had the biggest effect on residents based on their feedback?
- 7. How does compromise between government officials, other-parties involved, and residents around the development affect the design process? Are there frequent design elements that are subject to change and compromise (ie. height of buildings, distance to transportation etc.) due to this conflict?
- 8. What trends or patterns do you foresee in the future of redeveloped public housing?

9. To what extent are community members contacted to give their input in the redevelopment process?

Experts (Planners/Policymakers/Non-Profits)

- 1. When considering resident reactions to redeveloped homes, what factors/aspects are most discussed/brought up by residents? How is resident input implemented in the design process?
- 2. Biggest challenges both policy-wise and design-wise in the redevelopment process?
- 3. What can be done to ensure that in redeveloped housing projects that not just aesthetic/design are improved, but also socioeconomic conditions?
- 4. Are there examples of public housing projects abroad with certain features or design elements that America is trying to emulate? Why?
- 5. Have there been elements in revitalized public housing projects taken from global influences? What has been the resident reception of these elements?
- 6. How has public perception of public housing projects as an overall negative as a result of failures in the mid-20th century changed regarding modern redeveloped projects?
- 7. Are any elements of projects from the mid-century still implemented in reconstructed housing?
- 8. To what extent do unique aesthetics in building design affect how residents' feel a sense of belonging in their community?
- 9. To what extent do government programs (such as Rental Assistance Demonstration (RAD)) consider community needs when redeveloping projects?
- 10. Are there any certain architectural styles/design ethos that guide the redevelopment of these projects?
- 11. To what degree do movements like New Urbanism play in the redevelopment of public housing? What is the primary design ethos that guides redevelopment?

Post-Interview:

- 1. Anything else you would like to say that you didn't get to mention?
- 2. Would you have anyone else you'd like to refer for an interview?

Appendix #2:

Interviews

- 1. Interviewee #1 (2023, January 4). Video [Personal Interview]
- 2. Interviewee #1 (2023, January 5). Video [Personal Interview]
- 3. Interviewee #1 (2023, January 9). Video [Personal Interview]

- 4. Interviewee #1 (2023, January 11). Video [Personal Interview]
- 5. Interviewee #1 (2023, January 11). Video [Personal Interview]
- 6. Interviewee #1 (2023, January 19). Video [Personal Interview]
- 7. Interviewee #1 (2023, January 19). Video [Personal Interview]
- 8. Interviewee #1 (2023, February 10). Video [Personal Interview]

Appendix #3

Figures



Figure 1. "State Historical Society of Missouri / Research Center-St. Louis Photo Database."

1960. Photograph. Thomas Jefferson Library. St. Louis.

 $\underline{http://tjrhino1.umsl.edu/whmc/view.php?description_get=Pruitt+Igoe.}$



Figure 2. Vergara, Camilo J. 1989. "Robert Taylor Homes, 4022 S. State St. Chicago, 1989." Photograph. Library of Congress. https://www.loc.gov/item/2020695663/.



Figure 3. Singapore Housing & Development Board. March 2020. Photograph. Singapore. https://www.hdb.gov.sg/about-us/news-and-publications/publications/dwellings/housing-a-nation



Figure 4. Vigneau, Marylise. June 30, 2022. Photograph. Politico. Austria.

https://www.politico.eu/article/vienna-social-housing-architecture-austria-stigma/



Figure 5. Greene, Jackie. *Construction of Estrada Courts*, Undated. Photograph. Los Angeles Public Library. Los Angeles. https://www.laconservancy.org/locations/estrada-courts.



Figure 6. Damonte, Bruce, 2014, Photograph, Paulett Taggart Architects, San Francisco,

https://www.world-architects.com/en/architecture-news/works/hunters-view-redevelopment.



Figure 7. HACLA, Jordan Downs Redevelopment, 2020, Photograph, HACLA, Los Angeles,

https://www.hacla.org/en/development-services/development/jordan-downs-redevelopment.

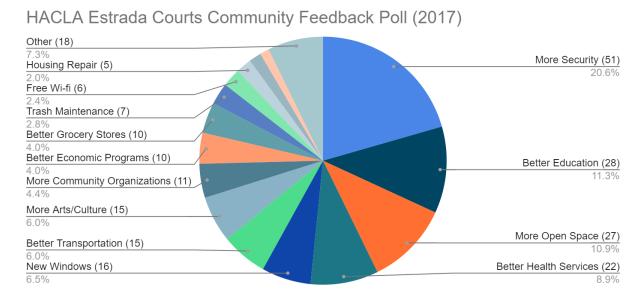


Figure 8. Housing Authority of Los Angeles, Accessed March 26, 2023.

https://neighborland.com/hacla/estrada-courts.



Figure 9. Unknown User, Google Maps. "Directions for Estrada Courts." Accessed March 12, 2023. from https://www.google.com/maps.



Figure 10. Google Maps. "Directions for Estrada Courts." Accessed March 12, 2023. from

https://www.google.com/map



Figure 11. Revitalized Hunter's View, 2021, Rendering, San Francisco,

file:///C:/Users/olive/Desktop/Hunters_View_Plans.pdf.



Figure 12. Hunter's View, 2023, Rendering, San Francisco. https://huntersview.info/community/



Figure 13. Mithun, 2017, Drawing, https://mithun.com/2017/06/02/jordan-downs-revitalization-breaksground/.

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