

ABSTRACT

Title of Thesis:

VACANT TO VIBRANT: EXPLORING
AFFORDABLE SOLUTIONS TO THE
HOUSING CRISIS IN BALTIMORE

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This thesis will explore solutions to the affordable housing crisis in West Baltimore by providing affordable housing options for low income residents. By investigating and understanding the history of housing discrimination and neighborhood inequity, this thesis addresses the reasoning behind the abundance of vacant homes that are dispersed throughout the city. The disinvested neighborhoods in West Baltimore will be shaped by affordable and sustainable architecture with the introduction of numerous housing typologies. Ultimately, this thesis strives to reignite Baltimore's vibrant culture and provide stable homes for a community that has been disproportionately ignored by the City of Baltimore.

VACANT TO VIBRANT: EXPLORING AFFORDABLE SOLUTIONS TO THE
HOUSING CRISIS IN BALTIMORE

by

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[2021]

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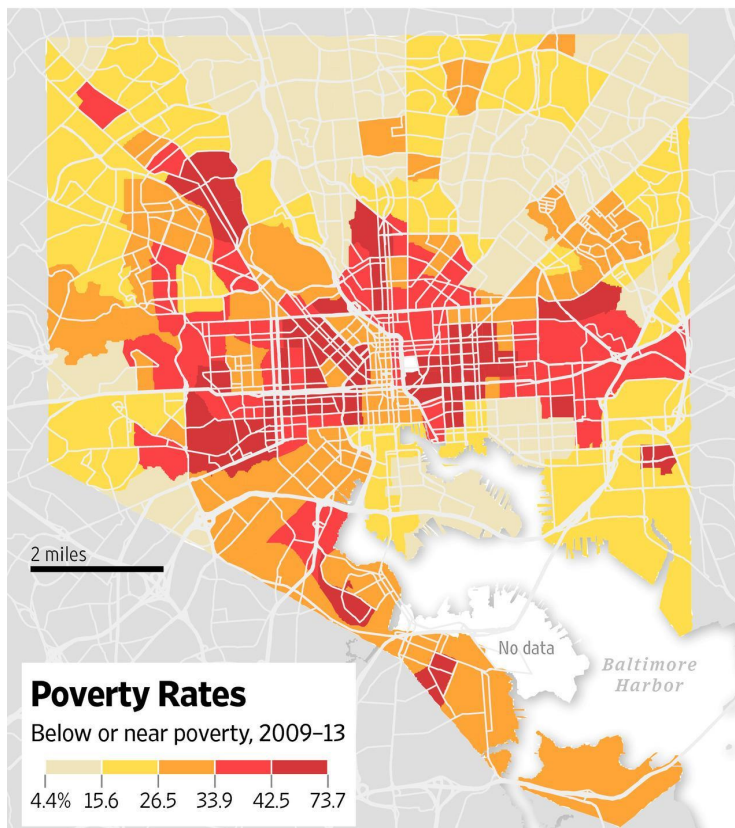
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Chapter 1: Understanding Baltimore City

1.1 Introduction

The city of Baltimore has undergone drastic changes in the last century. Baltimore has faced shifts in population size due to suburbanization, new forms of systemic racism due to redlining, and an influx of vacant housing. These changes have affected the city both socially and spatially. Housing inequality is particularly detrimental to inner-city Baltimore, whose population is primarily black residents. Low-income residents are disproportionately affected by property



value increases and have trouble receiving bank loans. These issues continue to threaten the majority of Baltimore's native residents today. Despite all of these opposing factors, the city's strong community bonds have allowed ¹locals to maintain the rich culture of Baltimore and begin to fight these injustices that affect thousands.

Figure 1.1: Baltimore Poverty Rates
Source: Wall Street Journal

¹ Welcome to the Department of Planning. (2020, March 16). Retrieved October 18, 2020, from <https://planning.baltimorecity.gov/>

1.2 Historic Context

The inequality of low-income residents in Baltimore city began in the early 1900s. This disparity originated primarily between black and white residents. During this time, Baltimore City promoted racial segregation in neighborhoods. This directly linked the desirability of a property to race, making it extremely difficult for black homeowners to secure a loan for their future homes. In the 1930s, suburban expansion began in almost all major cities. This suburbanization left out the black residents of Baltimore because developers purposefully constructed much larger houses that would yield a higher property. These outskirt developments skyrocketed following World War II. In the 1950s, developers began to realize that they could profit off of developments on the land outside the city. Soon they were building approximately 7,000 to 8,000 homes a year in counties neighboring Baltimore city. This led to the phenomena known as the “white flight,” or the migration of middle-class to wealthy white families from inner-city Baltimore to neighboring suburbs.² Baltimore city lost roughly 10,000 residents in the 1950s and 35,000 residents in the 1960s. This trend widened the gap between wealthy and poor neighborhoods and further displaced long-term black residents. The white flight forced many residents who stayed in the city out of their homes due to demolition rates increasing to nearly 2,600 per year.³ While direct segregation has ended, the effects of historical events are still felt across Baltimore city. Thousands of homes are vacant due to disinvestment of low-income neighborhoods and thousands of people on the streets.

² Welcome to the Department of Planning. (2020, March 16). Retrieved October 18, 2020, from <https://planning.baltimorecity.gov/>

³ Admin. (n.d.). Gentrification in Baltimore. Retrieved October 18, 2020, from <https://www.womenshousing.org/2019/05/17/gentrification-in-baltimore/>

1.3 Redlining

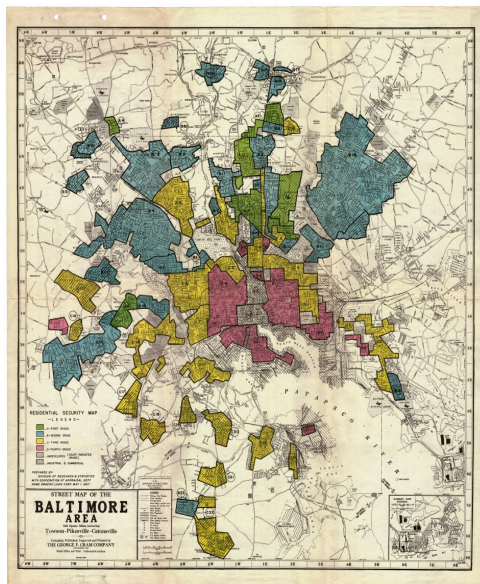
The effects of redlining are still quite apparent throughout Baltimore neighborhoods. Redlining was a policy enacted in the 1930s by the Federal Home Owners' Loan Corporation (HOLC) that allowed lenders, developers, and sellers to discriminate against buyers of color. HOLC did so by drawing maps where banks could or couldn't make loans, which quickly translated to the black neighborhoods being those who were unable. While this policy was abolished years later, redlined neighborhoods are still considered 'low-income' and are predominantly made up of black residents. The racially motivated housing division has a rippling effect in all aspects of the community's lives. One example is schools. Inner-city Baltimore has a particularly troublesome school system. This stems from the segregation of neighborhoods: neighborhoods with higher poverty rates will not receive as many school funds as neighborhoods with high property values would. The cyclical nature of redlining has kept systemic disinvestment and structural racism

stagnant.⁴

1.4 Today's Trends

Baltimore city has made great initiatives to introduce affordable housing into the city. However, low-income residents continue to struggle with loans and mortgages. In some cases, race still determines where private lending and investments happen in Baltimore.

Figure 2: Redlining map of 1937 **Source:** John's Hopkins University



⁴ Inequality by design: How redlining continues to shape our economy. (2020, April 17). Retrieved October 18, 2020, from <https://www.marketplace.org/2020/04/16/inequality-by-design-how-redlining-continues-to-shape-our-economy/>

	% Burdened Renters	% Renters Earning <\$35k Burdened	Median Contract Rent	Rank (Lowest to Highest)	Median Renter Income	Rank (Lowest To Highest)
Detroit, Michigan	66.1	82.9	\$548	1	\$16,225	1
Los Angeles, California	61.5	91.6	\$1,084	19	\$35,369	18
Philadelphia, Pennsylvania	57.5	86.0	\$746	12	\$26,603	3
Memphis, Tennessee	56.8	84.8	\$618	2	\$25,406	2
Baltimore, Maryland	56.4	82.0	\$774	15	\$27,302	4
San Jose, California	55.1	93.0	\$1,446	26	\$51,707	25
New York City, New York	54.0	86.4	\$1,125	21	\$40,908	21
Indianapolis, Indiana	53.6	83.8	\$634	3	\$27,528	5
Jacksonville, Florida	53.1	87.1	\$769	14	\$32,624	9
San Diego, California	52.8	91.5	\$1,254	24	\$47,843	24
Boston, Massachusetts	51.5	78.9	\$1,154	22	\$40,065	20
Denver, Colorado	51.1	82.1	\$831	16	\$32,709	10
Chicago, Illinois	51.0	86.1	\$836	17	\$33,706	14
Austin, Texas	50.5	92.4	\$863	18	\$38,825	19
San Antonio, Texas	49.8	81.9	\$690	6	\$31,814	8
Washington, DC	49.5	82.8	\$1,222	23	\$46,699	22
Phoenix, Arizona	49.3	84.2	\$723	11	\$32,971	12
Charlotte, North Carolina	49.0	85.4	\$763	13	\$35,283	17
Fort Worth, Texas	48.8	86.8	\$706	8	\$34,750	16
El Paso, Texas	48.7	68.1	\$660	5	\$28,665	6
Dallas, Texas	48.3	81.8	\$707	9	\$32,929	11
Nashville-Davidson, Tennessee	48.0	81.3	\$706	7	\$33,168	13
Columbus, Ohio	47.9	80.9	\$654	4	\$31,491	7
Houston, Texas	47.8	84.3	\$709	10	\$34,737	15
Seattle, Washington	45.3	87.9	\$1,087	20	\$47,761	23
San Francisco, California	44.7	81.3	\$1,440	25	\$61,210	26

Figure 3: Burdened renter statistics **Source:** Open Data Baltimore

The loophole that allows such discrimination from sellers and lenders is the buyers low income. A long-term resident, for example, may have had little to no problems paying their rent at their low-cost, yet poorly functioning home. Nonetheless, a lender may still not lend out a loan if they see that this resident has been paying less for their property than they will for a nicer home in a better area even if they have the funds. ⁵This cycle has still yet to be broken in 2020- rent raises and biased loan grants

⁵ Garboden, P. (n.d.). *Abell Report*. doi:<https://abell.org/sites/default/files/files/cd-doublecrisis516.pdf>

continue to disproportionately affect low-income residents in East and West Baltimore.

The city itself plays a significant role in the inequity among neighborhoods. Between 2011 and 2016, white neighborhoods received four times more capital investment than predominantly black neighborhoods, even though black people take up 85% of the population.⁶ The up and coming areas near the inner harbor cause a rise in property value and rent for all the neighborhoods within proximity. Increases like this are common in major cities, but are particularly dangerous in cities such as Baltimore. Baltimore is, in its nature, a poor city. The city is not always compensated with low cost living, but rather high cost living for the median income. This creates a high percentage of burden renters, meaning that they are paying 30% of their income in rent.

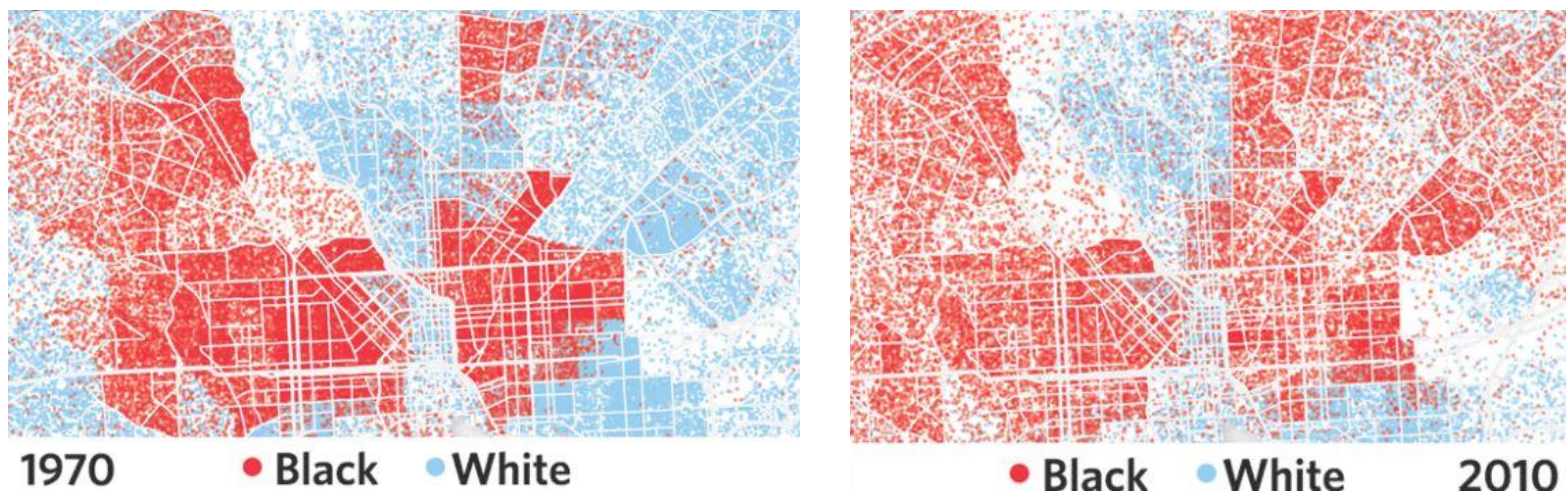


Figure 4: Demographic differentiation from 1970 to 2010 *Source:* WSJ Graphics

Lastly, low-income areas in Baltimore city face food and bank deserts. Larger grocery stores have been disinvested in and demolished in areas of East and West Baltimore. Additionally,

⁶ Heritage, B. (n.d.). 1930-1965: The Great Depression and World War II. Retrieved October 18, 2020, from <https://baltimoreheritage.github.io/civil-rights-heritage/1930-1965/>

banks have been closing in low-income areas. The bank deserts became significantly more common following the 2015 protests and riots regarding the violent death of an unarmed 25 year old, Freddie Gray⁷. Banks and stores who were thought of as valuable began rapidly closing in areas that were distraught by this incident. This puts low-income, and typically non-violent communities at an extreme disadvantage.

⁷ Deslippe, Dennis. "BUILD, Baltimore's Working Poor, and Economic Citizenship in The 1990s." *Journal of Civil and Human Rights*, vol. 6, no. 1, 2020, pp. 31–60. JSTOR, www.jstor.org/stable/10.5406/jcivihumarigh.6.1.0031. Accessed 18 Oct. 2020.

Chapter 2: Defining the Problem

2.1 Vacant Housing

Baltimore has one of the highest rates of vacant housing. In 2019, there were roughly 18,000 houses reported as vacant. This issue stems from a number of reasons. One of the leading reasons is racial discrimination that continues to be prevalent throughout the city. Another reason is the suburbanization that widely occurred in the 50s and 60s. Lastly, Baltimore experienced a massive job and population loss following this suburban expansion. In 1950, 950,000 people lived in the city.

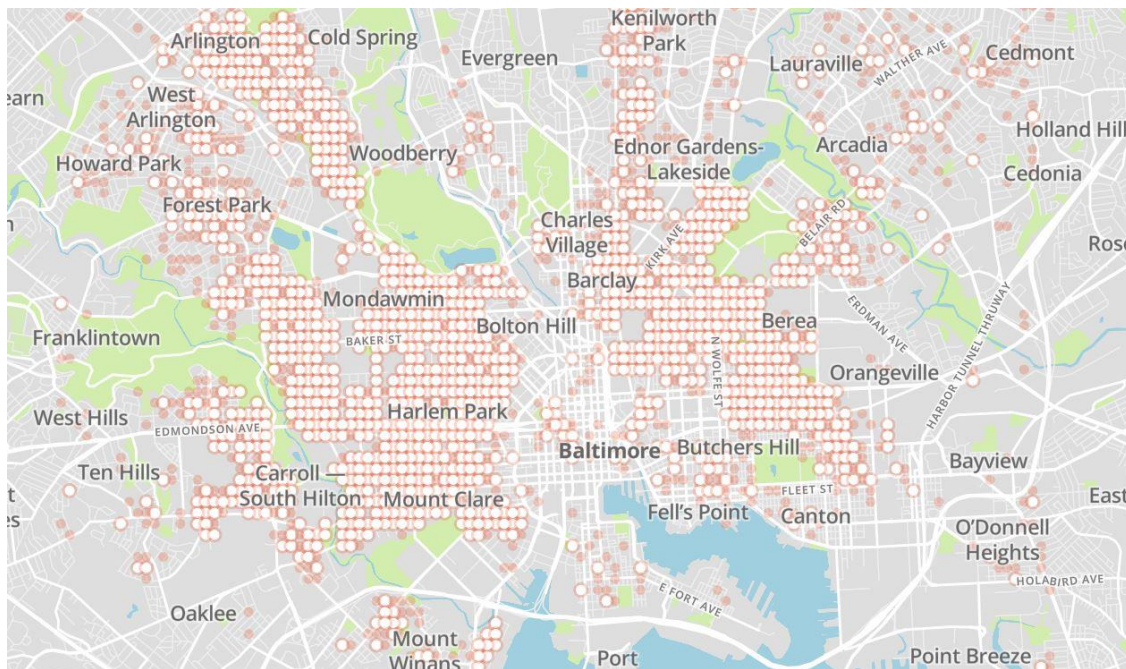


Figure 5:
Vacant
housing
map GIS
Online

In the early 2000s, the city's population drastically dropped to a mere 325,000 people.⁸ The number of vacant houses has stayed stagnant in the past 10 years. It seems that every demolished vacant property is replaced by a new one.

The vacancy rate is much more prevalent in predominantly black neighborhoods. In fact, the Baltimore Neighborhood Indicators Alliance (BNIA) reported the vacancy rate to be 2.54% in neighborhoods with less than 50% black residents, while neighborhoods with more than 80% black residents have a vacancy rate of 13.54%⁹. This issue can be resolved by replacing these vacant lots with promising affordable housing units that people in these areas can afford. This will make the upkeep and investment more desirable from buyers and the city. Luckily, there are a number of ongoing projects that aim to address the vacant housing crisis. While the problem is not directly being addressed by the state, smaller community based groups recognize the issue and have been working to create more livable neighborhoods. Acts like these give native Baltimore residents hope that their neighborhoods will be restored.

2.2 Rise of Gentrification

Gentrification can be defined as the process of improving a predominantly low-income area to fit the standards of the middle to high class. This process typically results in the displacement of original, low-income homeowners. The effects of gentrification can be seen in almost any major city. Baltimore is one of the top 7 cities that has reaped these effects. Unlike cities such as Washington D.C., Baltimore experiences much more localized gentrification. This means that improvement funds are solely being funneled into specific areas, rather than the city

⁸ Eli, & Johns. (2017, March 09). Retrieved October 18, 2020, from <https://baltimoreheritage.org/tag/vacant-houses/>

⁹ -, S., By, -, & Manas, S. (2018, October 16). Experts Take Aim at Baltimore's Gentrification. Retrieved October 18, 2020, from <https://www.marylandmatters.org/2018/04/20/experts-take-aim-at-baltimore-39-s-gentrification/>

as a whole. The areas that have quickly been gentrified directly correlate with areas that were left out of redline maps. These areas are known as the “L shape” in Baltimore, while the more disinvested and predominantly black areas are known as the “Black butterfly.”¹⁰

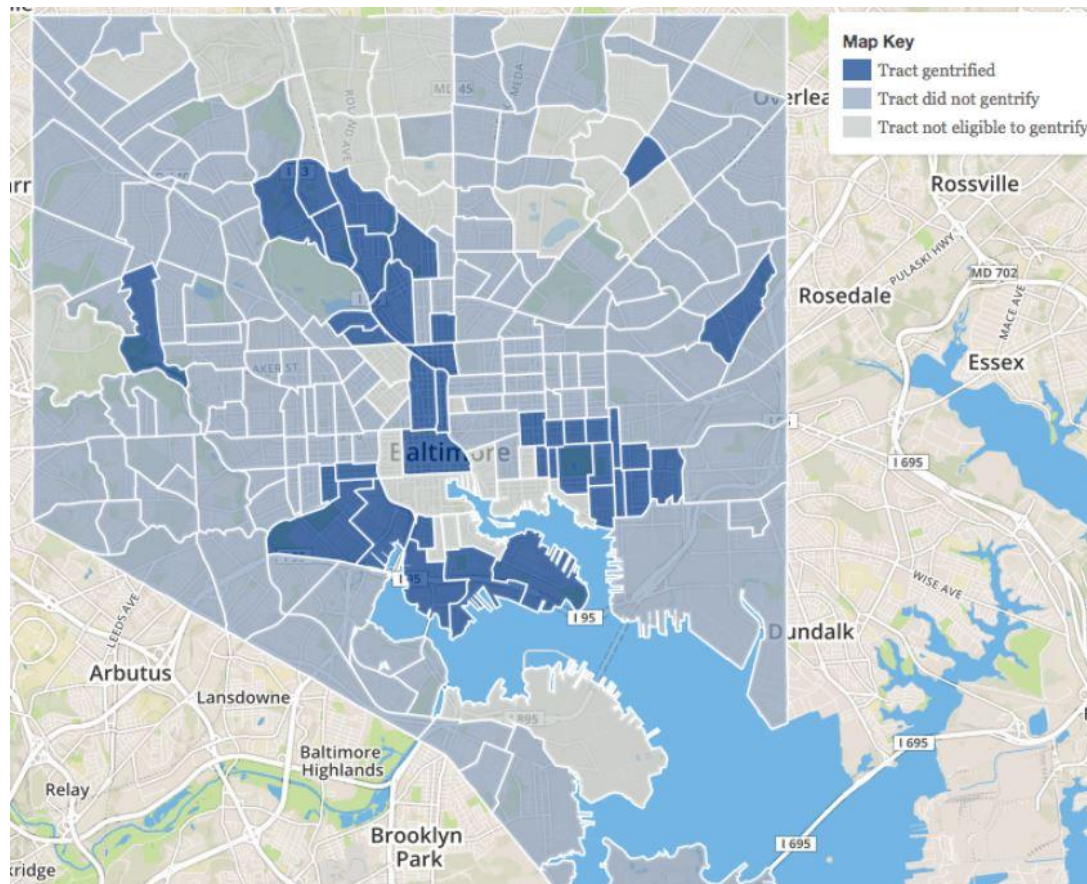


Figure 6: Gentrification Map

The “white L” runs up Charles street and through the inner harbor. These areas consistently receive more investment than the rest of the city, widening the gap between well-kept neighborhoods and disinvested ones. According to the National Community Reinvestment Coalition, Baltimore has seen some of the biggest changes in education levels and median income increases. These levels range by about 30%, meaning that the city is catering to new and

¹⁰ Billingham, Chase M. “THE BROADENING CONCEPTION OF GENTRIFICATION: RECENT DEVELOPMENTS AND AVENUES FOR FUTURE INQUIRY IN THE SOCIOLOGICAL STUDY OF URBAN CHANGE.” *Michigan Sociological Review*, vol. 29, 2015, pp. 75–102. JSTOR, www.jstor.org/stable/43630965. Accessed 18 Oct. 2020.

wealthy residents, as opposed to those who have been struggling to maintain and pay for the homes they've lived in for years.¹¹

Gentrification has a rippling effect. The city will not only overinvest in attractive neighborhoods, but in surrounding grocery stores, schools, and businesses. A Whole Foods is more likely to replace vacant properties in a gentrified area rather than affordable housing. The localized gentrification that Baltimore faces tends to squeeze low-income communities in-between highly developed areas that tend to attract middle-class or wealthy outsiders. According to NCRC, nearly ½ of residents in Baltimore live below 200% of the federal poverty line. Although city officials should be focused on improving these neighborhoods without displacement, it is up to the community and outside stakeholders to take charge and address the pressing issue of gentrification in Baltimore.

2.3 Existing Affordable Housing Programs

Many organizations recognize the inequity among neighborhoods throughout Baltimore. These issues have been addressed by groups dating back to the late 1960s. One of the early activist groups, Grassroots, organized in poor communities in Baltimore City. The group worked to create more equitable housing and economic opportunities. Additionally, they organized frequent rent strikes. Grassroots' culture is still prevalent in Baltimore today. The group has a number of political activism organizations and has shaped many of the newer affordable housing programs that are seen today.

¹¹ Theodos, B., Hangen, E., Meixell, B., Mangum, A., Baird, C., Wood, D., . . . Hinson, D. (2019, January 29). "The Black Butterfly". Retrieved October 18, 2020, from <https://apps.urban.org/features/baltimore-investment-flows/>

There are currently a number of affordable housing organizations that promote community engagement and celebrate Baltimore's historical culture. A long-term organization is Southeast Community Development Corporation (SE CDC). CDC was founded in 1975 by community activists and is one of the oldest community development corporations in Baltimore.¹² The organization runs a number of community revitalization programs throughout Southeast Baltimore. They offer HUD-certified housing counseling, which greatly helps low-income residents buy and manage their first or new homes. CDC partners with various schools and community centers to get a better sense of the communities' needs.



Figure 7: SE CDC Logo

A more recent and widely utilized organization is the Neighborhood Design Center (NDC). NDC expanded to Baltimore in 1993 and works to serve low-income residents in the area. The organization collaborates with the community's residents, stakeholders, and local government to get a holistic understanding of the community's needs. They work to improve neighborhoods and

¹² WELCOME TO SOUTHEAST BALTIMORE The Southeast CDC promotes healthy, dynamic and diverse communities throughout Southeast Baltimore. (n.d.). Retrieved October 18, 2020, from <http://www.southeastcdc.org/>

revitalize abandoned buildings while being sensitive to low-income residents' budgets. ¹³Their work has resulted in overwhelmingly positive results such as lower violence and crime rates and an overall sense of worth felt by the communities involved. A recent community involved project was the Duncan Miracle Garden on Duncan Street in an East Baltimore neighborhood. This project uplifted and engaged the surrounding community by providing them a communal space to grow produce and sustainably maintain their homes. Overall, NDC has successfully created a sense of togetherness throughout low-income neighborhoods in Baltimore.



Figure 8: NDC Duncan Park Phases

¹³ Duncan St. Miracle Garden: Supporting a Black-led urban farming tradition in East Baltimore. (n.d.). Retrieved October 18, 2020, from <https://ndc-md.org/case-study/duncan-st-miracle-garden>

Chapter 3: Designing for Communities in Need

3.1 The Voices of West Baltimore

The residents of Baltimore have faced numerous hardships throughout the years. Their voices have repeatedly been ignored by city officials and those in power. There are some areas within Baltimore city that have been hit harder than others in terms of social issues, poverty, and disinvestment from the city, West Baltimore being one of those communities.

Indicator	Core Central West Baltimore	Outer Ring Central West Baltimore	Baltimore
Percent of white residents, 2000	8.8%	32.9%	32.2%
Percent of black residents, 2000	89.9%	64.4%	65.0%
Percent of people older than 16 employed, 2000	40.0%	46.5%	50.5%
Percent of vacant and abandoned properties, 2005	19.2%	9.8%	7.6%
Percent of residential properties with \$5,000 or greater rehab permits, 2005	1.9%	4.5%	2.8%
Percent of children 0–5 with lead poisoning, 2005	7.7%	5.5%	4.8%
Number of homicides, 2005	55	17	266
Number of police calls for narcotics-related issues, 2005 (per 1,000 residents)	385.7	176	146.3
Violent crime rate, 2005 (per 1,000 residents)	25.0	22.2	17.8
Median sales price for single- family properties, 2005	\$58,000	\$89,800	\$105,000
Average household income, 1999	\$33,061	\$40,489	\$44,311

Source: Jacob France Institute, University of Baltimore

Figure 9: West Baltimore vs Baltimore city demographics

West Baltimore was inhabited by a lively and close knit community in the 1960s¹⁴. However, the neighborhoods slowly decayed as families lost their stable income.

For the last few decades, West Baltimore has been plagued by poverty, joblessness, violence, and addiction. Many residents have been forced out of their homes due to increased loan rates or general home disinvestment from the city.

14

Zielenbach, Sean. "Community Development in Central West Baltimore: An Analysis of Opportunities and Limitations." *Journal of Affordable Housing & Community Development Law*, vol. 17, no. 4, 2008,

Although communities across Baltimore City face similar struggles, it is clearly shown by data sources and by the community that West Baltimore is struggling exponentially more. According to the American Community Survey (ACS), nearly a third of residents in West Baltimore are living below the poverty line and nearly a half are unemployed or working under their qualifications.¹⁵ Vacant homes are reported to be much higher in the W Baltimore neighborhoods. The remaining homes have been reported to be in quite poor conditions, some having unstable foundations and insect infestations. The city has disregarded the lives of residents in West Baltimore and have invested more in neighborhoods that are in better



Figure 10: Vacant row houses in Sandtown, Baltimore **Source:** Google Maps Street View

conditions. While residents often say that there is “not much there” in reference to W Baltimore, there is a substantial number of people who continue to live there that deserve a stable and safe community.

¹⁵ Crowhurst, Suzanne. “Reinventing Community Planning: Sandtown, Baltimore.” *Reinventing Community Planning: Sandtown, Baltimore* | *International Making Cities Livable*, www.livablecities.org/articles/reinventing-community-planning-sandtown-baltimore.

3.2 Rebuilding a Community

Residents in West Baltimore often feel that they are disregarded and profiled by those in power, leading to feelings of distrust and unease in neighborhoods. Incarceration rates are higher in West Baltimore than any other area within the city. Following the 2015 protests against police brutality, the neighborhoods of West Baltimore have been patrolled more and more by police. Additionally, the graduation rates at two public high schools are 56% and 39%, which are much lower than the city average of 83%.¹⁶ The infrastructure of West Baltimore essentially puts its residents at a vast disadvantage from the start.

As previously mentioned, communities within West Baltimore are overlooked. However, the residents in these communities have experienced the same struggles to some degree. This creates a bond between residents, even if they are unaware of it. A group of people within the same area are considered a community when there is mutual trust, shared interests and general care for one another. The sparseness of housing followed by general feelings of distrust in the city have de-socialized members of the West Baltimore community. This climate can shift, however, if effort is placed into improving the community and area to fit the residents' needs rather than attempting to relocate them. Once residents begin to regain trust and feel a sense of security in their homes, socialization will occur and tight knit communities will begin to form.

3.3 Design Intent

The intent of this proposal is to reactivate and revitalize the neighborhoods that have been disinvested in West Baltimore. The core of the community in these neighborhoods has been disassembled and divided from the lack of attention the city and planners have given.

¹⁶ Zeilenbach, Sean

The goal is to investigate the needs of the community and use these findings to improve the area without driving residents out. There are a number of urgent issues that need to be addressed:

1. The abundance of vacant homes, which divide the community
2. The lack of safety felt from over policing and street violence
3. The lack of resources (i.e. educational resources) and public spaces
4. The lack of employment opportunities
5. The lack of grocery stores and retail establishments

These issues can begin to be addressed by revitalizing the existing vacant homes, replacing them with mixed-affordable homes. Residents will begin to feel safe again within their blocks and ultimately feel comfortable with their neighbors. Socialization of broken communities can only lead to success. Once social interactions begin to spark amongst residents, healthy and sustainable behavior can form. For instance, residents who may have issues with substance abuse or are having difficulty finding a job can share their stories and learn from one another in this type of environment.



Figure 11 : Figure ground of West Baltimore, white buildings represent vacant homes



Figure 12: Potential intervention in West Baltimore: New housing in orange

3.4 Site Analysis

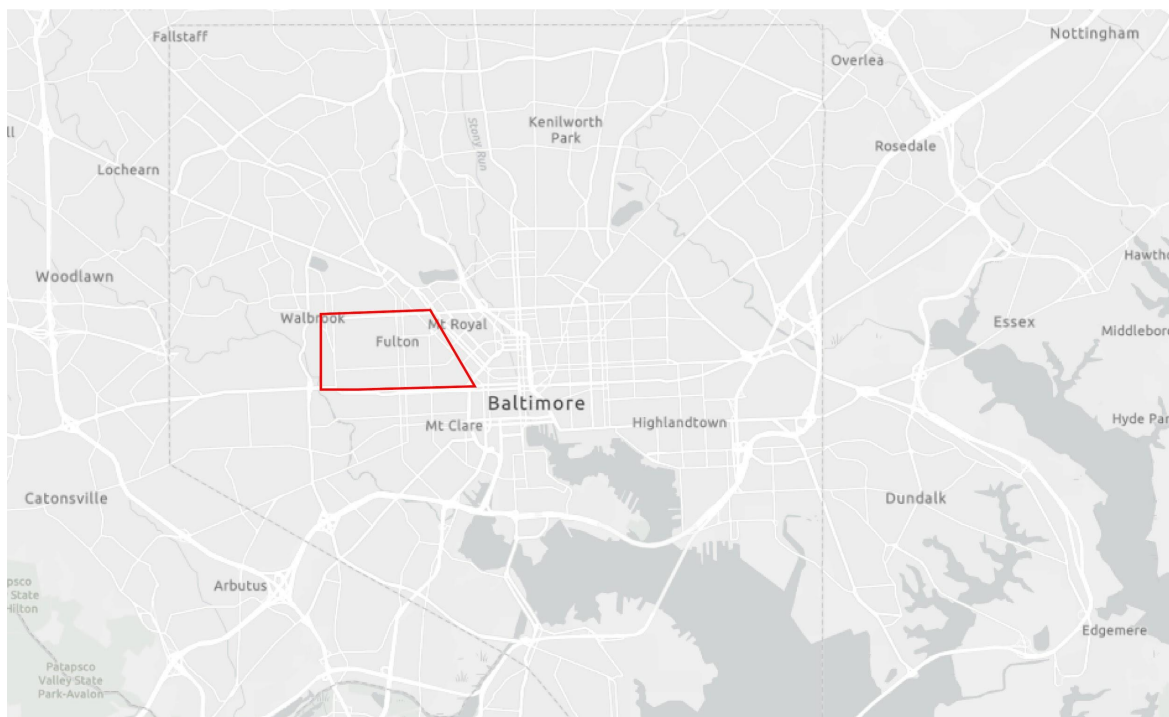


Figure 13: Location of site in context

West Baltimore is a prime area for redevelopment in the city. The site is in need of improvements as the number of vacant homes continues to rise. The abundance of unused property allows for development on the blocks that are primarily empty. Since West Baltimore neighborhoods have one of the highest rates of vacant homes, the residents will likely react to redevelopment positively, as fewer people need to be displaced.¹⁷



Figure 14: Vacant homes in West Baltimore (shown in red)

Most of Baltimore city's neighborhoods are composed of similar grids and layouts. Residential blocks are typically made up of brick townhouse rows with the occasional corner store. There is little variation in the block formation and most facades are similar in appearance. This block formation has been fragmented by the increase of vacant homes and the drug market that has

¹⁷ "How Does Baltimore Count Vacant Buildings?" *Vacant Buildings 101*, 5 Oct. 2016, baltimoreheritage.github.io/vacant-buildings-101/guides/counting-vacants/.

taken over a number of these corner shops. The desolation and misuse of certain corners has caused some areas in West Baltimore to be quite dangerous.

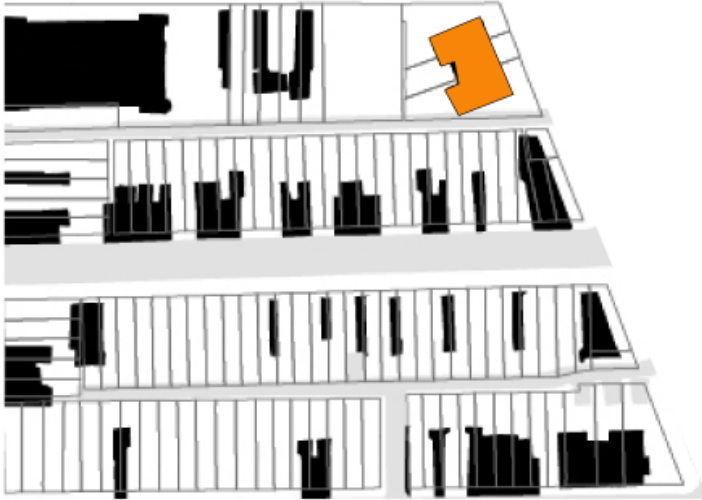


Figure 15: Typical Block in West Baltimore, orange representing the corner store



Figure 16: Typical corner store and row house formation

Despite the site's setbacks, West Baltimore has potential to create densely populated neighborhoods. The West Baltimore MARC commuter rail station sits in the heart of the central west area. The accessibility to public transportation is crucial for residents in this area, as many of them are unable to afford cars. Those living in West Baltimore will be able to enter inner-city Baltimore quickly, even without a vehicle. In addition to the existing bus stops that exist within the site, the Red Line, a mass light rail transit, has been proposed to run from east to west Baltimore in the coming future. This development has potential to increase the population density in West Baltimore, specifically the blocks that undergo this thesis' intervention.

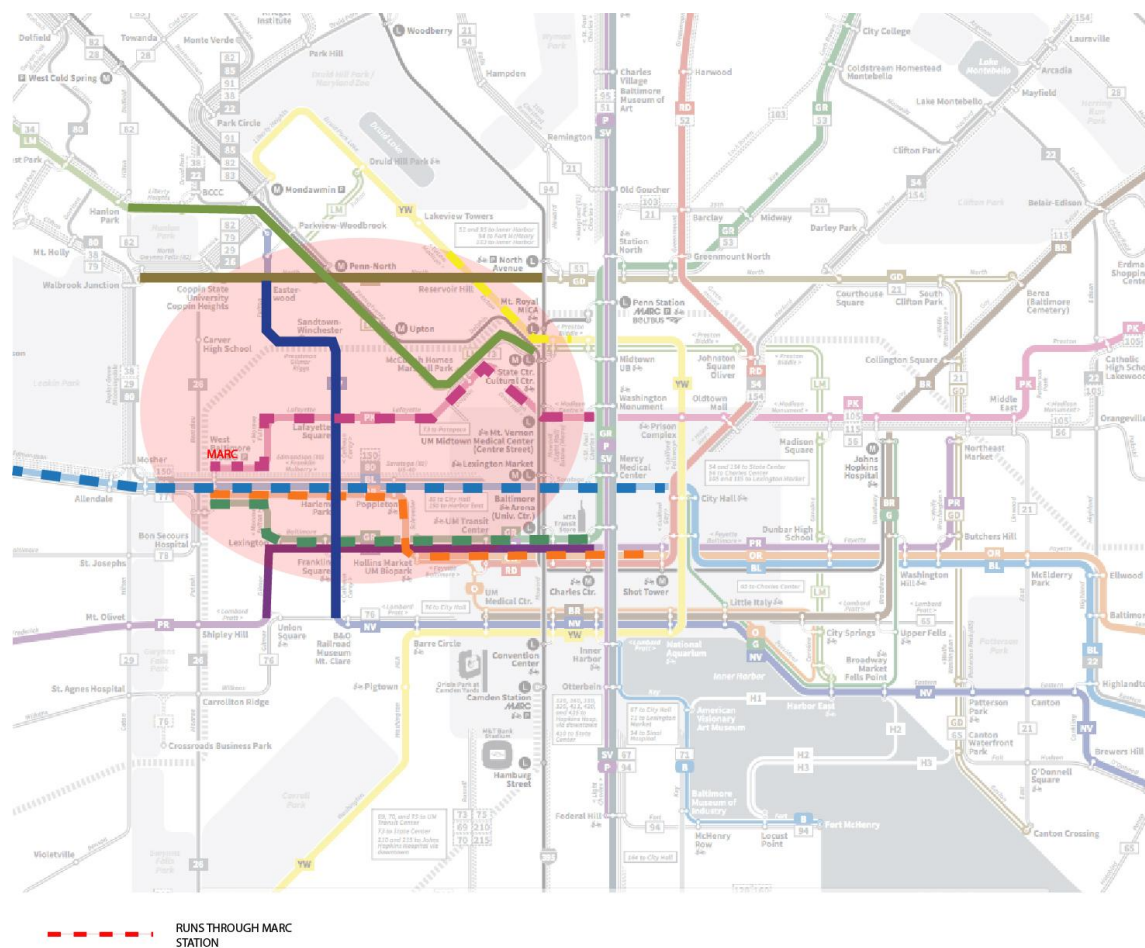


Figure 17: Transit routes and bus stops Source: WMATA Baltimore

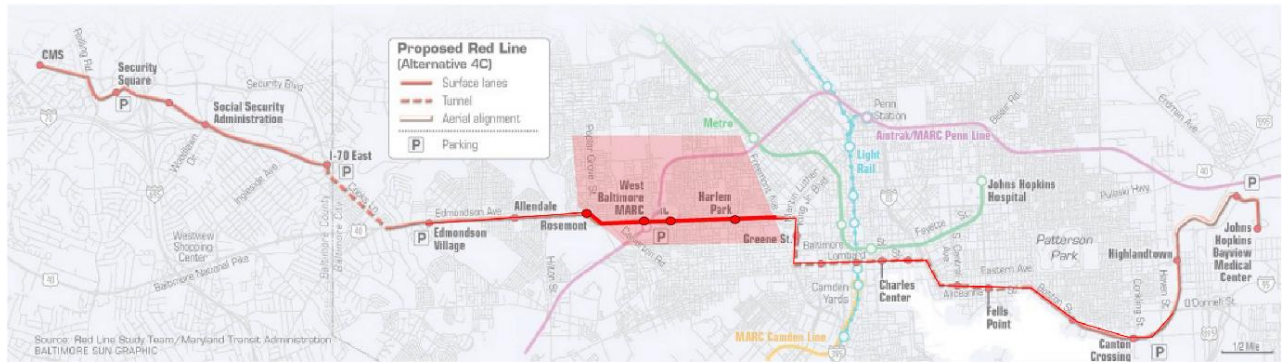


Figure 18: Red Line proposed route Source: WMATA

Urban planners have already begun speculating ways that development could occur near the proposed Red Line. However, many of these propositions do take the residents of West Baltimore's needs into consideration, but rather try to increase the property values within the area.

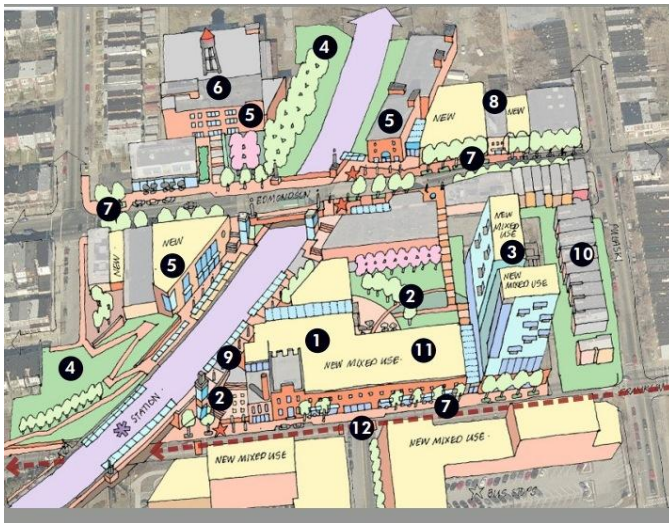


Figure 19: Proposed Redline Development

Central West Baltimore's urban fabric is primarily composed of residential neighborhoods. Many of the commercial buildings have closed due to disinvestment from the city or from the aftermath of the 2015 riots¹⁸ against police brutality, which led to many banks in the area to be boarded up and eventually close. The lack of banks in West Baltimore, particularly Sandtown, has made it increasingly more difficult for residents to have consultation on their income and receive housing loans. In addition to food deserts, there is an absence of social activities throughout the site. There are little to no bars or restaurants and only one central, public park, making socialization and community building difficult.

Figure 20: Public and commercial spaces in West Baltimore

Notable institutions and commercial properties begin to emerge in the outskirts of West Baltimore. University of Maryland Baltimore is a quick bus stop away from the core of the site, located closer to the inner city on West Lexington Street. University of Maryland's biopark, a biomedical research center located very close to central West Baltimore along Baltimore West Street. The proximity of these institutions have the ability to influence future developments in the site. Being such a renowned university, developers may try to gentrify this area in order to serve students entering the area. Although gentrification poses a risk for existing residents, UMD Baltimore brings in intelligent people at a global scale, particularly in the STEM field. Collaboration between neighborhoods in need and students could result in improvements in the community's overall health and wellbeing.

¹⁸ Vey, Jennifer S. Vey "The Challenges of Baltimore (and the Nation) in Context." *Brookings*, Brookings, 29 July 2016, www.brookings.edu/blog/the-avenue/2015/05/07/the-challenges-of-baltimore-and-the-nation-in-context/.



Figure 21: Surrounding education institutions

Chapter 4: Design Intent

4.1 Program Development

As previously mentioned, the residents of West Baltimore have been displaced and dispersed due to the high concentration of vacant homes. The goal of this proposal is for the residents to reclaim their neighborhood and community. If a community loses control over their neighborhood, they will have a more difficult time rebuilding relationships and regaining trust that have been lost with the increase of vacancies. This thesis aims to address the socio economic issues that have been caused by this urban decay. The proposal will do so by introducing mixed affordable housing, which will replace the homes that are currently vacant.

The project will begin by demolishing blocks that have the highest concentration of vacant homes in order to avoid lengthy displacement for those residing in adjacent buildings. A mix of affordable homes, public space, and improved corner markets will inhabit the currently desolate blocks. These homes will range from single family homes to small-scale apartments, all which will preserve the aesthetic of the existing fabric. These community complexes will range in values, allowing residents of all salary ranges to live amongst each other. The blocks will include outdoor public space, something that the area is lacking. The corner markets will be restored, allowing residents to have easy access to food and general supplies.

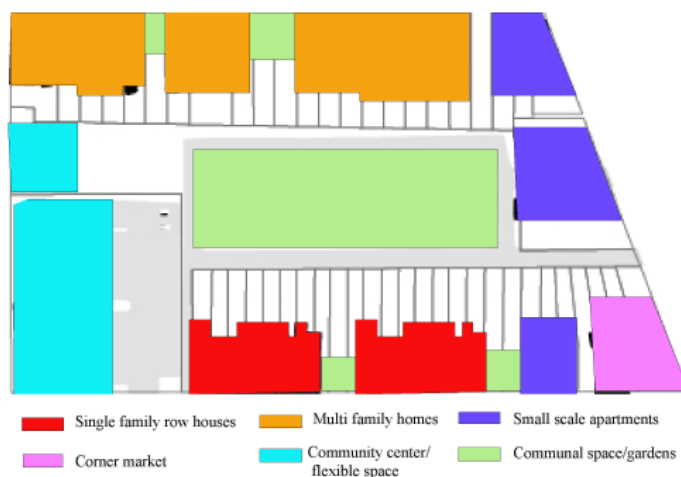


Figure 22: Program configuration

Lastly, the developments will include flexible learning spaces or community centers. These public buildings will act as safe learning or gathering spaces for students or groups.

The scope of these developments will begin with one block, slowly evolving into two or three. The goal is to engage the existing communities in the development of this thesis. For instance, those who are unemployed, yet skilled in construction work, may help with the construction process. This not only provides residents with employment, but gains them valuable knowledge. The hope is that this project becomes replicable throughout West Baltimore and reignites the communities that have been ignored by the city.

4.2 Case Study: Hargood Close Social Housing

Social housing has become an increasingly popular housing design in Europe. According to the Community Service Society, social housing is defined as a housing model that strives to achieve permanent affordability, social equality, and democratic resident control.



Figure 23: View of Hargood Close social housing's courtyard **Source:** Archdaily

¹⁹The goals of social housing models perfectly align with the goal of this thesis, which is to get residents back on their feet by providing them with affordable housing options. Hargood Close social housing is a project in Essex, United Kingdom, designed by Proctor and Matthews Architects.

The project was completed in 2013 and has a total square footage of 2409 meters. Hargood Close replaced a previous hostel and was turned into rental apartments and homes ranging in size. ²⁰ The architects made an effort to include a number of flexible spaces for the general community.

They also included offices for staff that work in the building. The complex surrounds a central courtyard that is open to the public along with a communal garden.



Figure 24: Plan of Hargood Close **Source:** Archdaily

¹⁹ Waters, Oksana MironovaThomas J. “Social Housing in the U.S.” *Social Housing in the U.S. | Community Service Society of New York*, www.cssny.org/news/entry/social-housing-in-the-us.

²⁰ Aguilar, Cristian. “Hargood Close / Proctor and Matthews.” *ArchDaily*, ArchDaily, 31 May 2015, www.archdaily.com/522081/hargood-close-proctor-and-matthews.

The architects paid close attention to the existing urban fabric throughout Essex. They preserved the brick facades and created intricate openings to allow light to shine through the corridors between units. These design choices effectively mimic those seen throughout the city. Overall, residents were quite pleased with the result of the redevelopment. Residents were able to stay here for a leasing period in order to get themselves back on their feet. The housing model encouraged social interaction by introducing a number of public spaces, allowing residents to learn from one another and form healthier habits.

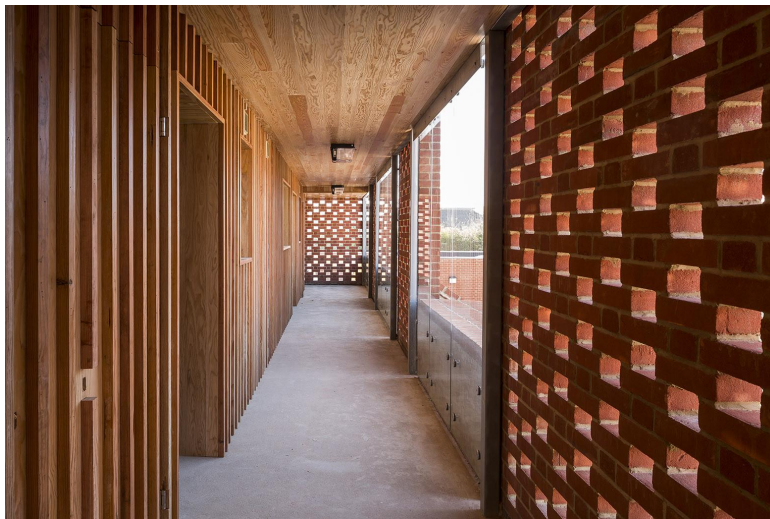


Figure 25: Interior of Hargood Close social housing **Source:** Archdaily

4.3 Case Study: Monsignor Anthony J. Baretta Apartments

The Monsignor Anthony J. Beretta apartments are located in Brooklyn, New York and designed by RKTB Architects. The project was completed under Mayor Bloomberg's New Housing Marketplace Plan (NHMP) in 2013. The architects proved that affordable architecture can be both well designed and contextual. The 69,877 square foot project transformed

underutilized land in Brooklyn.²¹ A number of public and private organizations made this project possible, including the New York City Department of Housing Preservation and Development (HPD) and the New York State Homes and Community Renewal (HCR).

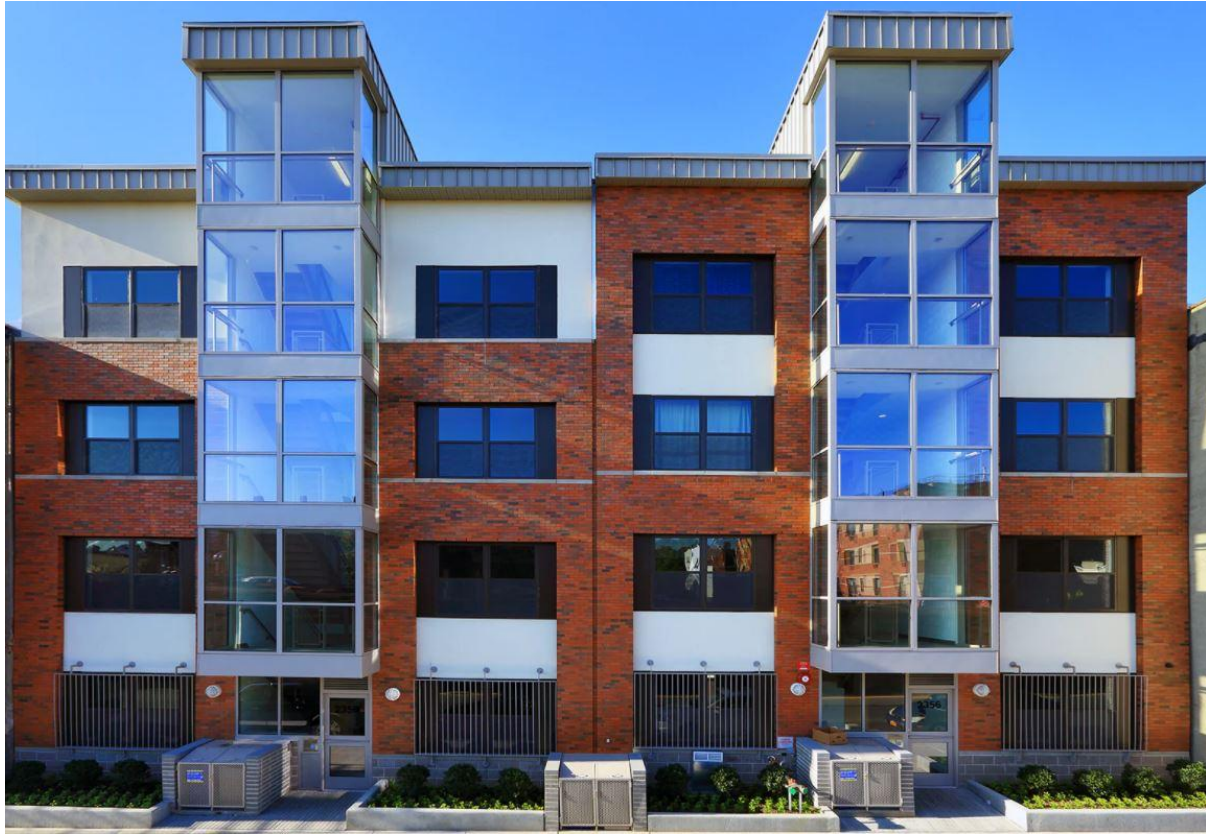


Figure 26: Street view of Monsignor Anthony J. Beretta Apartments

Source: Architect magazine

The goal of this project was to create affordable homes for those who have been displaced due to gentrification in New York City. There is a significant housing shortage in New York City and the architects aimed to design affordable homes that fit within the existing context, but use much more affordable materials. Nearly 5,000 families applied to rent these apartments

²¹ “Monsignor Anthony J. Barretta Apartments: RKTB Architects, P.C.: Media - Photos and Videos - 2.” *Archello*, archello.com/story/63816/attachments/photos-videos/2.

within the first week, 8 being reserved for the lowest income residents. The determination of the parties involved in the development of these apartments is commendable. While this project is at a much smaller scale than the proposed thesis, there are valuable takeaways from the project's design process. It will be beneficial to investigate the process of finding affordable materials that are efficient and contextual. Lastly, it will be crucial to explore organizations that may provide significant contributions to the thesis.²²



Figure 27: Corner view of Monsignor Anthony J. Beretta apartments

Source: Architect Magazine

²² RKTB Architects

Chapter 5: Design Approach

5.1 Design Principles

This thesis will use a small-scale urban design approach to address the issues in West Baltimore. The design will involve demolishing and redeveloping disinvested blocks with decaying homes. While refurbishment is a possibility, many of the vacant homes within the site are far beyond repair. Additionally, the residents of West Baltimore will likely regain their sense of community if they are submerged into a completely new environment and not reminded of their past homes. The design strives to maintain the aesthetic and vibrancy of Baltimore but will add a more modern touch.

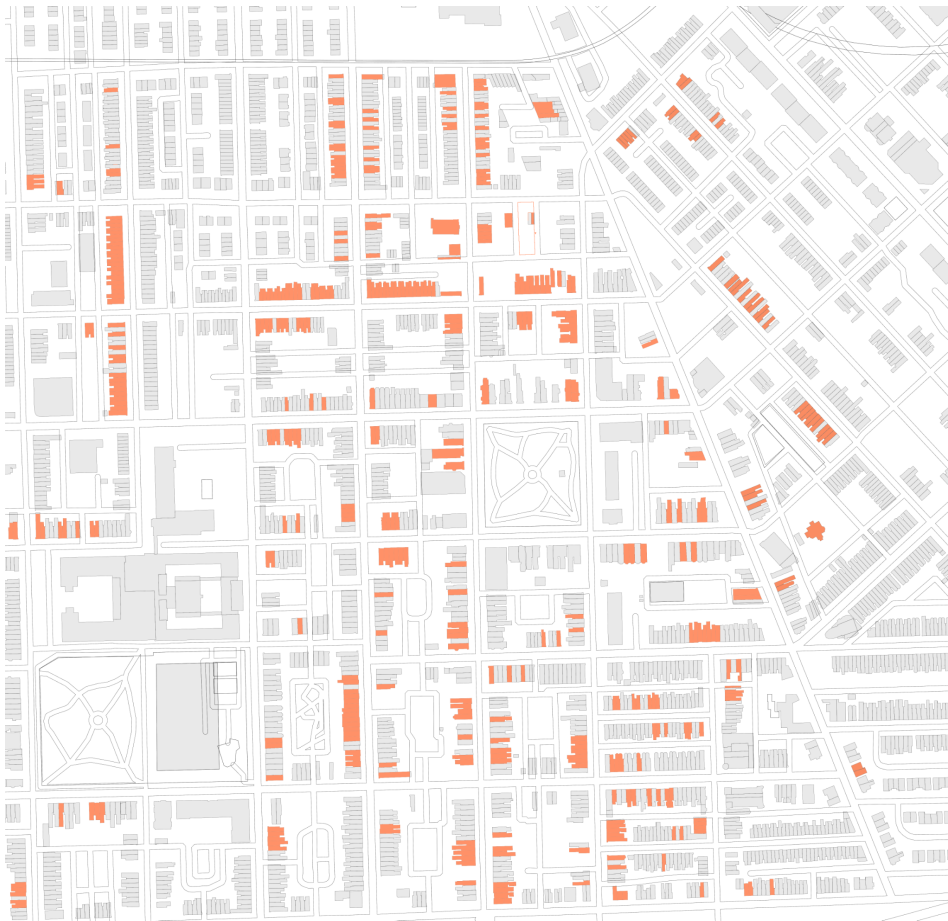


Figure 28: Vacancy Concentration and Proposed Development

As previously mentioned, the proposal will include a variety of houses and mixed use development. The types of mixed use and stores directly correlate to the needs of the residents in West Baltimore. There is a wide range of age groups and family sizes that currently reside in the site. This design will cater to the needs of every resident. In addition to the affordable row homes and small apartments, the development will include health centers, community centers, and spaces for younger residents to learn if they are in school. The proposal will also address the lack of grocery stores in the area. Many of the corner market stores have become vacant or are not upkeep well. By introducing a variety of mixed use, the communities that have been ignored will begin to rebuild themselves and become stronger. Additionally, this thesis addresses the lack of health care availability residents' have in West Baltimore. The design will incorporate a health clinic in order to provide health services for the audience.

The project is driven by a number of design principles. The selection of the building typologies are chosen by looking at the site conditions and the needs of the residents. Based off of previous research on the site demographics and the residents' struggles, the mixed use and residential buildings introduced in this proposal aim to provide:

- Affordable options for low-income residents
- Resources that West Baltimore has been lacking (i.e health services, healthy groceries, learning resources)
- Communal and civic space

The schematic design encompasses all of these design drivers in the program. The configuration of the spaces will be optimized to provide the majority of West Baltimore's residents with these

resources. For instance, the community center will be quite large and located on the corner of a major road in order to serve students who may not have a space to learn.



Figure 29: Design Principles Diagram

5.2 Program Size

The size of the development's program varies depending on the type of housing or mixed use. The community centers will be located on the corners of two of the four blocks so residents within the development and outside the development can access them easily. These will be larger than most of the other mixed use. Other public buildings, such as grocery stores, health centers,

and learning centers, will be located on either corners or major roads so that they are accessible by everyone surrounding the development, rather than just those living in it. The affordable housing units will vary in size as well. In order to accommodate residents from all walks of life, there will be larger row homes and two bedroom apartment units that can fit larger families. Additionally, the development will include one bedroom apartments and smaller row homes for those who may live with a significant other, roommates, or on their own.

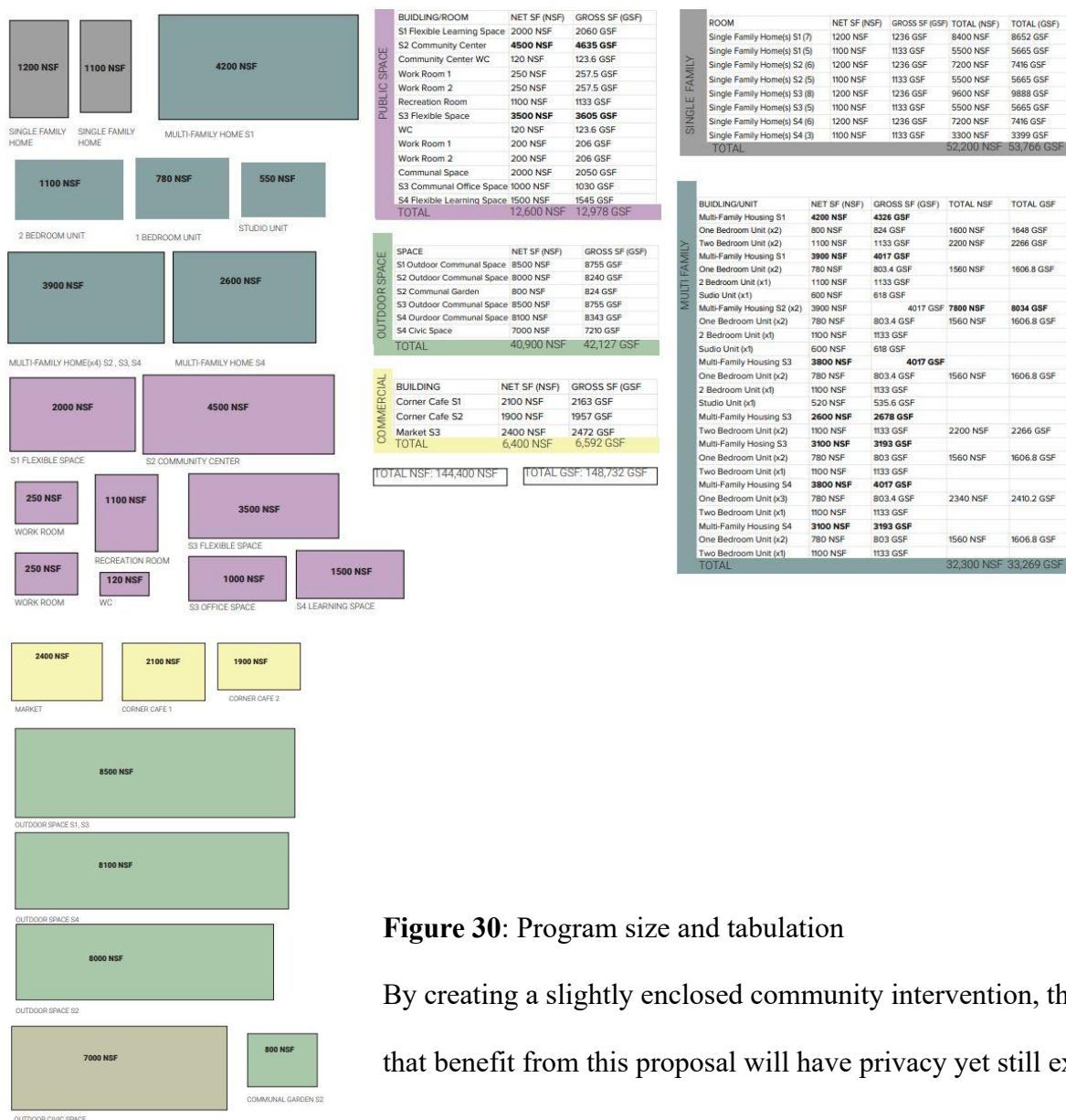


Figure 30: Program size and tabulation

By creating a slightly enclosed community intervention, the residents that benefit from this proposal will have privacy yet still experience

life at an urban scale. Since this is a low-income area, those without cars will struggle less to get their groceries and partake in recreational activity. However, if they need time to relax and avoid the busy city, they can return to their smaller scaled community.

5.3 Program

The formal program of this thesis includes: single family row houses, row houses with a basement rental unit, work-live apartments, garden apartments, triplexes, duplexes, community centers, and a health center. It is important to include a wide range of housing in order to cater to residents of all income levels.

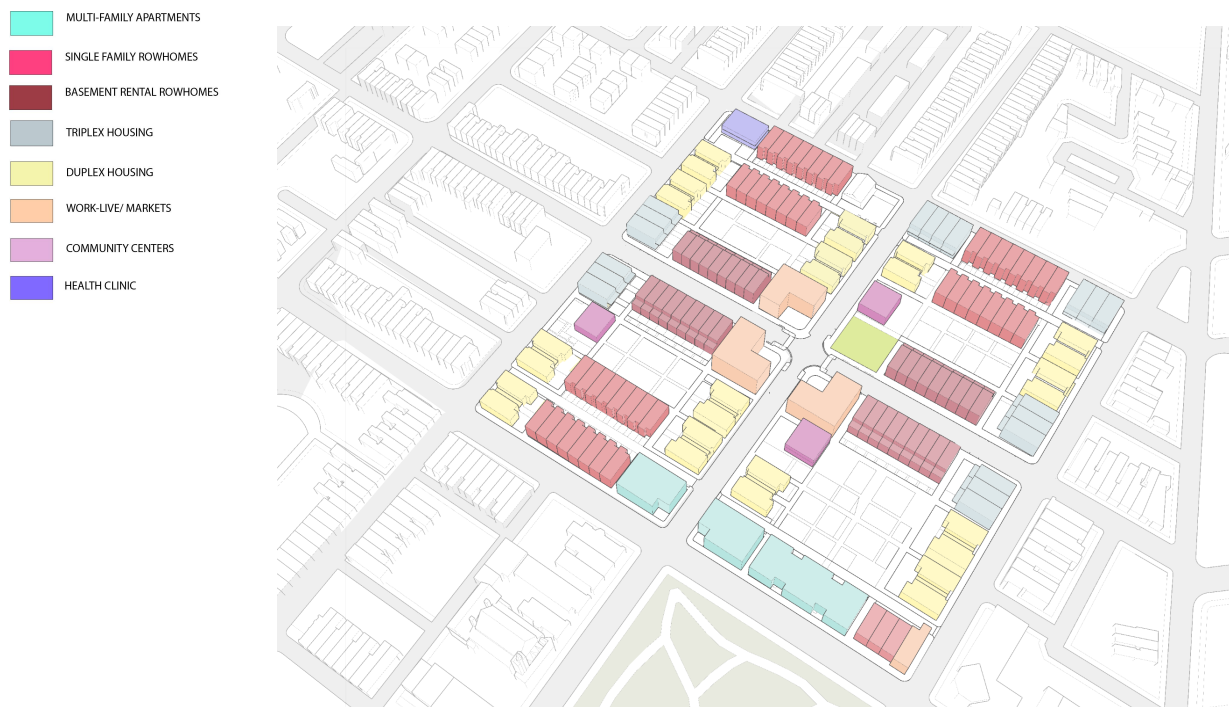


Figure 31: Program Diagram

5.4 Specific Program

The first two housing types are the single family row houses, one having a garage entry and one having a basement rental unit. The rental unit was included in order to create home ownership income for the families that own the row house.

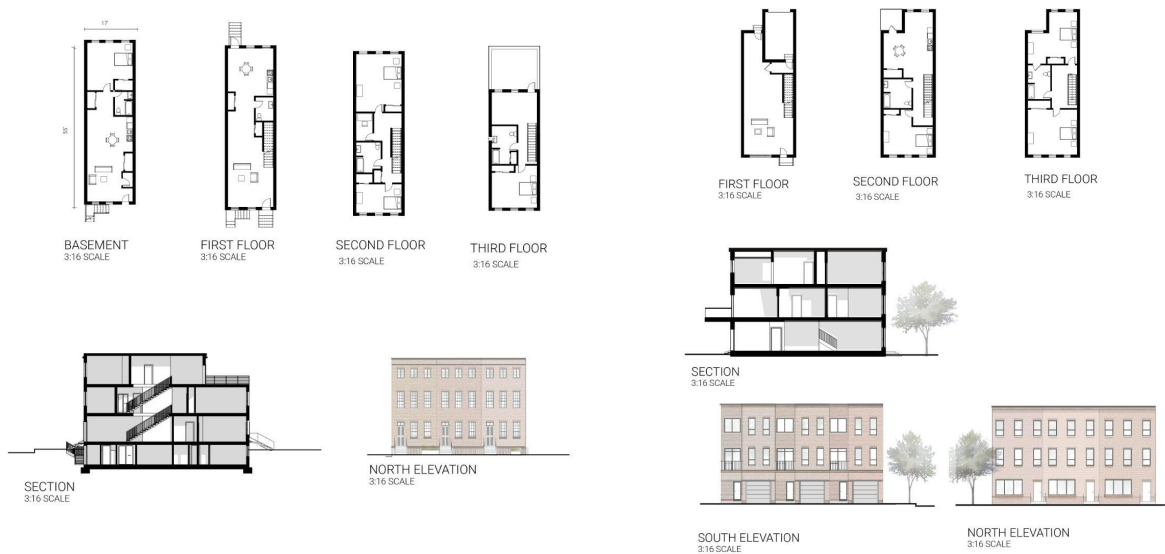


Figure 32: Single row house and Rental Unit Row house Orthographic Drawings



Figure 33: Single row house and Rental Unit Row house Perspectives

The second two housing typologies were introduced for residents who are not financially stable enough to purchase an entire home. The duplex and triplex have up to four units with a central staircase leading people to the units on the second and third levels.



Figure 33: Duplex and Triplex Orthographic Drawings



Figure 34: Duplex and Triplex Perspectives

The last two housing typologies are apartments, a housing type that is slightly sparse in West Baltimore. This housing type was introduced to create the most housing density possible. Additionally, one of the apartment buildings has a grocery store and convenience store on the first level. This type of apartment aims to mimic the corner markets that are dispersed throughout the city, but at a slightly larger scale in order to address the massive food desert that West Baltimore faces.



Figure 35: Live-Work and Garden Apartment Orthographic Drawings



Figure 36: Live-Work and Garden Apartment Perspectives

5.5 Materiality

The structure and materiality of this proposal is fairly straightforward. Baltimore is known for its brick row homes. This thesis will use recycled brick from the viable row homes that are vacant in order to remain sustainable and reuse existing material. Additionally, the structures of these housing typologies will remain the same across the board. The floors and roofs will use plywood decking with concrete foundations and recycled brick facades.

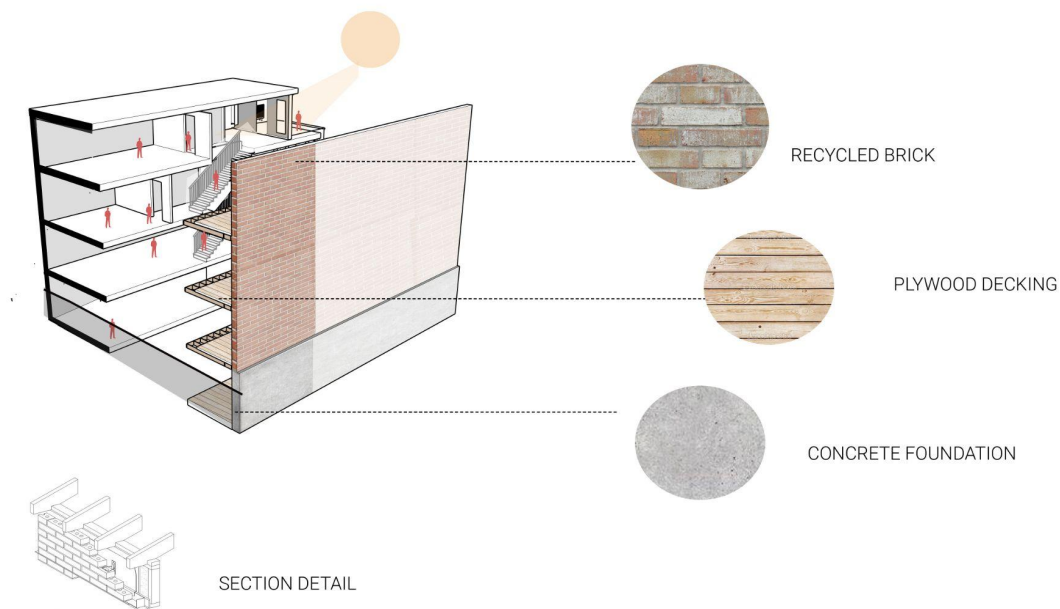


Figure 37: Materiality Diagram

5.6 Reactivating the City Streets

Although this specific site is ridden with vacant and decaying homes, the streets that run along the site are still quite busy. Lafayette park, a large and utilized public park, is located across the street from the site, giving it potential to be a very dense area, as there is little public space spread throughout West Baltimore. The development runs along W Lafayette Ave and N Carrollton Street. These roads will be reactivated as major routes to get to the inner-city, the MARC train station, and finally the thesis' development. Additionally, the intersection of N. Carrollton Street and Mosher Street will become a center for pedestrian activity.



Figure 38: Intersection Perspective

This intersection, which is currently filled with a vacant lot and homes, will contain the three work-live apartments and a pocket park where the vacant lot currently is. This intersection will act as a multipurpose space for residents to eat outside, play in the park, and gather.

Additionally, this proposal incorporates complete streets into the design. Currently, the site has street parking and a few planters and trees to provide shade for pedestrians on the sidewalk. However, this is not enough to create a true complete street. This new design introduces planters that separate parking spaces and crosswalks so that pedestrians can cross the streets safely. The proposed street intervention also connects the site to Lafayette park more clearly, so residents have a clearer path getting from their home to the park.



Figure 39: Street Section across New Carrollton Street

By bringing more activity to this area, the population density will drastically increase, creating an overall safer environment for residents. Safety is another important driver of this design. Disinvested areas, such as West Baltimore, are prone to more dangerous activity because there is a lack of daily activities, which leads to the area being taken over by crime. The quality of life is decreased when an area is barren and potentially unsafe. It becomes difficult for residents to learn or focus when they feel unsafe.

This intervention aims to address this safety issue by bringing more people into the area and investing in the neighborhoods that have been overlooked by the city.

Lastly, the site incorporates pedestrian and vehicular travel between the mixed use homes. Some of the row homes have back entryways with garages for higher income residents with cars. There is a one way road that allows for cars to pass by each block. Below are diagrams showing the pedestrian and vehicular travel paths.



Figure 40: Pedestrian Paths

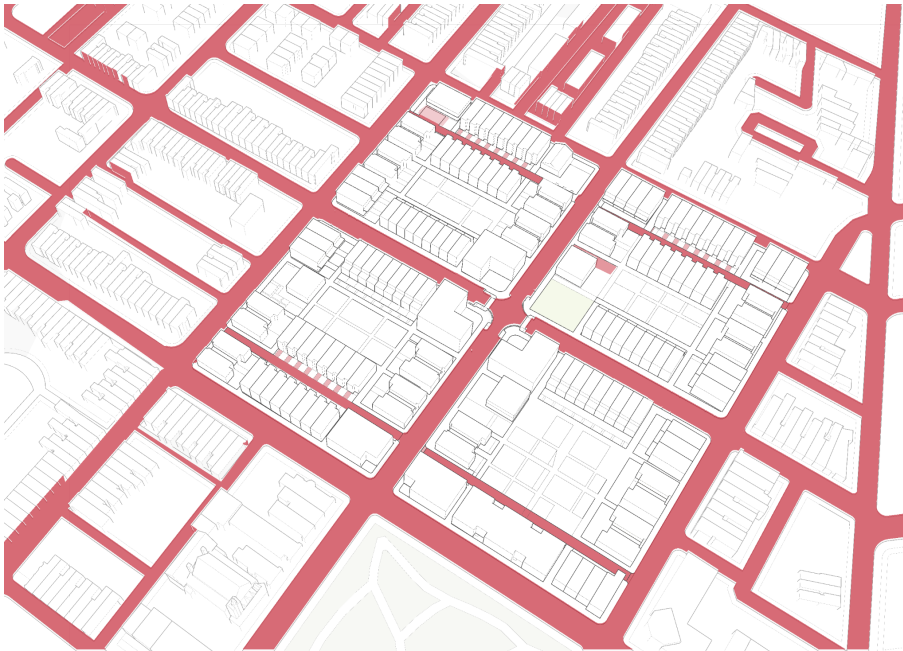


Figure 41: Vehicular Paths

5.7 Community Involvement

This proposal aims to benefit the people of West Baltimore throughout the entire process. As previously mentioned, residents will have a working opportunity to help with the construction process and finishing touches. Once the development is completed, neighboring institutions, such as University of Maryland Baltimore, will have opportunities to help with the health centers implemented in the site. Locals who have artistic passions and surrounding art schools will be able to contribute their work in the communal areas that are surrounded by the development. For instance, the design may include community gardens and communal graffiti or art walls where residents and locals can showcase their talents and use the space as a learning experience.



Figure 42: Communal Park Perspective

Chapter 6: Lasting Impacts

6.1 Community Impact

The goal of this thesis is to create long-term, positive changes in the lives' of West Baltimore residents because they have been widely ignored in the past. These changes will be seen once the development starts to be utilized by locals. Once the number of vacant homes diminishes, communities will start to rebuild and people will become more comfortable interacting with their neighbors again. There will be no questions or curiosity if a home is inhabited, because the new development will close the gap between vacant and stable homes.

The collaborative nature of this project will give the site's residents something to be proud of, as they will have been involved in the entire design and construction process. In order to consider a project a success, it must address the key issues that the surrounding community faces. In this proposal's case, a major issue is affordability. Therefore, this project must take the lowest-income residents into account during the design process in order to benefit West Baltimore's community to the fullest.

The site provides numerous opportunities for its residents. The community center creates learning opportunities for children after school. It acts as a central, community gathering space for all residents who live in the area. The large, central garden spaces between the houses could create maintenance job opportunities for residents. This also applies to the communal garden that is located behind the garden apartment overlooking Lafayette Park.



Figure 42: Inner Courtyard View

6.2 Project Phasing and Continued Redevelopment

West Baltimore is in need of major revitalization as a whole. Although this urban design proposal only covers roughly four blocks within West Baltimore, the typology of this design can exist and replicate itself in other neighborhoods that have been disinvested in. In the immediate site, this proposal will be phased based off of the streets that contain the highest number of vacancies. For example, the street across from Lafayette park will likely be touched last since many of the row houses are perfectly viable. This thesis does not aim to completely demolish all of the existing homes, specifically the row homes that are not vacant. However, the design will replace the vacancies that are damaged beyond repair in hopes to repair a broken and repeatedly ignored community.

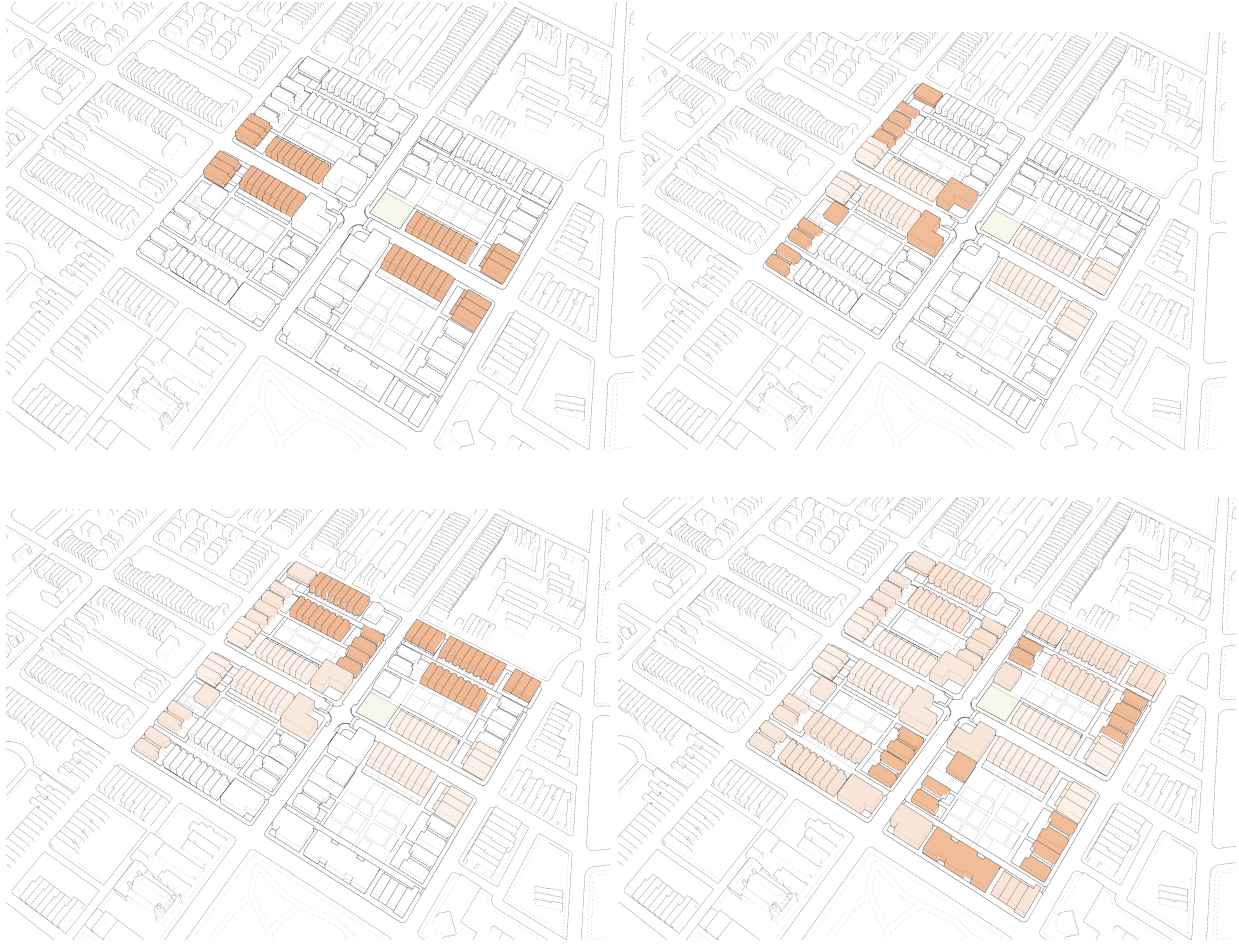


Figure 43 : Phasing Diagram

As discussed in earlier chapters, locals have become less engaged with their community due to poverty, disinvestment in the existing buildings, and increased crime. The goal of this urban design scheme is to renew West Baltimore by affordably reinventing its neighborhoods and providing residents with a kit of parts that allow them to rebuild their community. Once the design of this thesis gains recognition and the residents' approval, this typology can be replicated in other neighborhoods that have a high concentration of vacant homes.

The proposal can continue throughout West Baltimore in phases, beginning on blocks that have the highest number of vacancies. This strategy will further engage the community and give them safe and affordable homes while providing them with the educational, social, and necessary resources they need to thrive.

6.3 Conclusion

_____As architects and planners, we must use our designs to better communities in need. This thesis proposal is intended to explore redevelopment options that provide for the needs of all the residents in West Baltimore. This document highlights the reasoning behind the urban blight that Baltimore is facing. West Baltimore is in dire need of housing reform. Since the city has generally chosen the route of disinvesting in the neighborhoods that are the most affected by decay, the redevelopment of these neighborhoods must become a design problem at the urban scale. The program of this development has been carefully crafted to help residents regain their homes by providing affordable options and resources that help them get back on their feet and live better lives. The themes of this proposal's development provide a deeper understanding of the housing crisis in Baltimore and explore solutions by intervening on a smaller scale. The goal of this thesis is that its strategies can be implemented at a universal level. Affordable and thoughtful redevelopment is doable and should be practiced everywhere, especially in areas that are in need to the same degree as West Baltimore.



Figure 35: Before Aerial View



: Figure 36: After Aerial View

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