

**FROM ANOMIE TO AGRICULTURE: ON SPATIALLY PRODUCED  
VIOLENCE, SOCIAL TRANSFORMATION AND ARCHITECTURE**

by

Brady Christensen

Submitted in partial fulfilment of the requirements  
for the degree of Master of Architecture

at

Dalhousie University  
Halifax, Nova Scotia  
March 2019

© Copyright by Brady Christensen, 2019

# CONTENTS

Abstract .....	iv
Acknowledgements .....	v
Chapter 1: Introduction .....	1
Overview.....	2
Thesis Question.....	3
Chapter 2: History and Context .....	4
History .....	4
Segregation .....	4
Infrastructure.....	5
Riots.....	5
Gang Violence .....	6
Current Events.....	7
Community Areas .....	8
Site (Community).....	12
Chapter 3: Design: Strategy and Framework .....	14
Re(Claim) .....	14
Re(Connect) .....	23
Centralized Community Networks .....	24
Decentralized Community Networks.....	25
Distributed Community Networks .....	25
Re(Vitalize) .....	26
Benefits of Urban Agriculture .....	28
Constraints and Barriers to Urban Agriculture .....	34
Case Studies .....	40
Chapter 4: Design: Site .....	45
Specific Site Selection .....	45
Chapter 5: Design: Interventions .....	49
Design Strategy .....	49
Phase I: Memorial Gardens.....	49
Phase.....	49

Site.....	51
Purpose .....	54
Design.....	54
Phase II: Urban Agriculture-Business Incubator .....	55
Phase.....	55
Site.....	59
Purpose .....	59
Design.....	60
Program .....	60
Structure .....	65
Phase III: Modular Incubator Pods .....	68
Phase.....	68
Site.....	68
Design.....	69
Phase IV: Memorial Farms .....	78
Phase.....	78
Purpose .....	78
Chapter 6: Conclusion .....	79
References .....	82

## **ABSTRACT**

This thesis investigates the transformative potential of architecture as means of mitigating violence in West Garfield Park, Chicago (Illinois, United States). The unremitting violence that plagues the area has accelerated the rate of urban decay over the past decade, resulting in an abundance of vacant land and dilapidated infrastructure. This thesis acknowledges and defends the value of these blighted urban characteristics as sites of opportunity to mitigate the violence that created them. Through the alteration of perceptions and the implementation of a phased intervention strategy, the proposed design seeks to transform the social dynamics in which violence is spatially produced. The full capacity for violence mitigation is realized through the reproduction and transmission of knowledge and experience necessary to replicate the creation of fundamental community networks. It is through the potential to replicate these processes that the established thesis framework can be applied to urban environments with similar urban dynamics.

## **ACKNOWLEDGEMENTS**

I wish to extend thanks to Elisa Dainese and Sarah Bonnemaïson for their exceptional guidance and wisdom. Your enthusiasm and critical insight has been invaluable to the development of this thesis.

To my parents, Daniel and Shawna Christensen and my brother Mark for their unconditional support and encouragement. Your unwavering belief and guidance throughout my personal, academic and professional pursuits has undoubtedly contributed to my overall success and well-being.

To my past educator, Barry Smith, who's dedication to architectural education and design technology inspired me to pursue studies in the field of architecture.

Finally, I would like to thank all of my fellow peers and studio colleagues, who provided much appreciated feedback and support throughout my academic career.

# CHAPTER 1: INTRODUCTION



Representational Collage | Present Day

## Overview

Everyday in Chicago, innocent and/or misguided individuals are senselessly wounded or killed as a result of gun violence (Bell and Jenkins 1993, 46). Family members, loved ones, communities, and infrastructure suffer as a result of the unremitting violence that plagues a number of Chicago neighborhoods.

The ineffectiveness of current gun violence mitigation strategies highlights the urgency for alternative approaches (Lugalia-Hollon 2018, 55). Current gun violence control methods largely consist of increased policing and incarceration. The current methods respond to violence through force and intimidation, but fail to address the underlying social processes that produce violent environments (Lugalia-Hollon 2018, 56).

Through addressing the prominent socio-spatial processes that shape violence, this thesis defines a systematic approach where the production and manipulation of space through urban agriculture-based program provides a medium through which reformative social practices can be achieved. These processes primarily focus on the construction of individual and collective social networks and the psychological impact of urban environmental stimuli, such as buildings, gaps in the urban fabric, and deteriorating infrastructure on individual and collective perceptions of space. The integration of memorial gardens, an agricultural business incubator and modular incubator pods aim to re-activate a localized means of economic production, while engaging youth and providing places of collective community engagement. The agricultural-based program derived from the acknowledgment of the major deficiencies in the



Makeshift Sign (PBS NewsHour).

production of social space seeks to provide an architectural medium through which community members and youth can begin to re-establish collective community networks as means of mitigating violence.

The thesis first establishes the historical context as a means of identifying driving forces behind the current state of violence in Chicago neighbourhoods. By understanding how the historical circumstances shape violence in current day environments, the thesis establishes geographic context through defining possible neighborhoods for architectural intervention based on prevalence of violence. The thesis then establishes the underlying Re(Claim), Re(Connect), and Re(Vitalize) framework, followed by the selection and justification of specific intervention locations based on key social, economic and environmental characteristics. Finally the thesis proposes an architecture intervention strategy to mitigate violence, and reinforces its potential to be applied in various geographical locations with similar compositional characteristics.

The thesis methodology utilizes the information developed in the framework to propose a phased strategy aimed at mitigating violence. Each phase and intervention acts as a catalyst for the creation of fundamental community networks while simultaneously altering perceptions that transform the social dynamics in which violence is spatially produced.

### **Thesis Question**

How can architecture be used to catalyze community networks and alter perceptions in Chicago's most violent neighborhood as means of transforming the social dynamics in which violence is spatially produced?



## CHAPTER 2: HISTORY AND CONTEXT

### History

Chicago's history of gun violence (among other factors) extends from decades of racial segregation, corrupt government planning policies, laws, and infrastructure projects, gang activity, social strife and economic turmoil (Sampson 2013, 77). In order to begin to understand the atrocious socio-spatial conditions that define many of Chicago's most violent neighborhoods, it is crucial to identify the major underlying historical actors that have contributed to such environments, and in addition, highlight key modern day events that strengthen the successful potential of architectural intervention as means of violence mitigation.

### Segregation

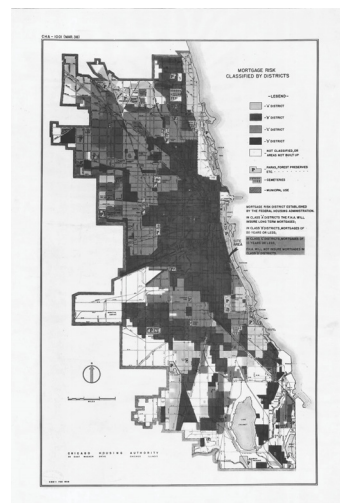
Racial segregation in Chicago has historically and currently taken form through many outlets, from white-community-lead initiatives that refused African-Americans from settling in predominantly white neighborhoods, to racially influenced planning policies that restricted the availability of economic funding to minority residents in order to prevent neighborhood mobility (Haines 2010, 3). Although many instances of racially charged historic events have contributed to present day violence faced by residents, one of the most notable is the practice of redlining that took place from 1935-1967. This process arbitrarily denied or limited financial services to specific neighborhoods most often because its residents were of color and/or in a state of poverty (Gartz 2018). The process of redlining effectively compounded the already extensive issues being faced by African-American residents in these neighbourhoods at the time. This process inevit-



Pulaski and Wilcox 1965  
(Chicago Gang History).



Pulaski and Wilcox 2018  
(Google Maps).



Chicago Housing Authority, and United States. Federal Housing Administration. Mortgage Risk Classified By Districts: [Chicago, Illinois]. Chicago: Chicago Housing Authority, 1938.

ably clustered neighbourhoods of significant disadvantage into the South and West sides that define Chicago's current reputation for gun violence.

### Infrastructure

Another factor contributing to the current abundance of violence, was the construction of large infrastructure projects that dominated, separated and displaced neighborhoods (Hirsch 1998, 8). This urban renewal and expressway construction accounted for nearly 80% of individuals displaced (Johnstone 1981, 326). Most notably is the construction of the Eisenhower Expressway (I-290), which cut through many West-side neighborhoods, eventually, displacing many predominantly African American families (Sampson 2013, 9). This division of people deteriorated the collective sense of community that many neighborhoods need to thrive, inevitably straining the already tense social relationships resulting from policies of racial segregation.

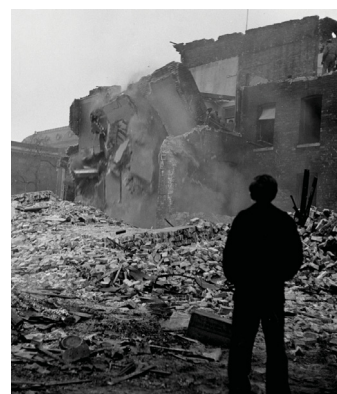
### Riots

From 1965-1968, intense riots fuelled by racial disparity resulted in the destruction of many homes and businesses on the West and South Sides of Chicago. As reiterated by Hirsch, "The prevailing image of the 1968 disorder was evoked not by mass murder but by the flames that enveloped stores along a 2-mile stretch of Madison Street and those that engulfed similar structures along Western, Kedzie, and Pulaski avenues" (Hirsch 1998, 23).

The resulting destruction of African-American businesses and households forced the relocation of countless individuals, establishing new boundaries and barriers (Hirsch



Aerial View of Eisenhower Expressway (CERA Chicago)



Demolition on the Near West Side in preparation for the Expressway Construction, 1949. (University of Chicago Photographic Archive. Mildred Mead Photographs, apf2-09137)



Riots Decimate West Madison Street - 1968 (Luigi Mendicino/Chicago Tribune)

1998, 9). This destruction further drove the remaining white home and business owners out of the area (Abu-Lughod 2012, 79-119). As experienced by the community of West Garfield Park, "The worst rioting in 1968 occurred on the West Side" (Hirsch 1998, 22). The poor environmental conditions that remained as a by-product of racial tensions further deteriorated the social relationships necessary to neighborhood stability. As a result, the lack of social stability brought decades of violence, crime and hopelessness to the area (Abu-Lughod 2012, 79-119).

### **Gang Violence**

As the area slipped further into despair, increased gang activity solidified and intensified the occurrence of violence. Gang disputes and organized drug trafficking plagued South and West Chicago neighborhoods from 1970 until the early 2000's. Gangs were identified by several distinctive characteristics such as a defined territories, a formal structure, identifiable leaders, strong in-group loyalty coupled with out-group hostility, norms and taboos regarding certain behavior (Johnstone 1981, 355). As noted by Johnstone, "Gangs did not form for the purpose of committing delinquent or violent acts: rather, they evolved naturally out of the street-corner play groups prevalent wherever large numbers of children and adolescents are left to structure their own time" (Johnstone 1981, 356). Gangs are notoriously stigmatized for their perpetuation of criminal activity and violent behaviour, but contrary to common perceptions, they fashioned social order in situations that were otherwise unstructured and reduced social uncertainty in culturally heterogeneous social settings. (Johnstone 1981, 357).

What followed nearly half a century of gang violence is ex-

hibited by the deplorable social and environmental conditions currently plaguing these neighborhoods.

## **Current Events**

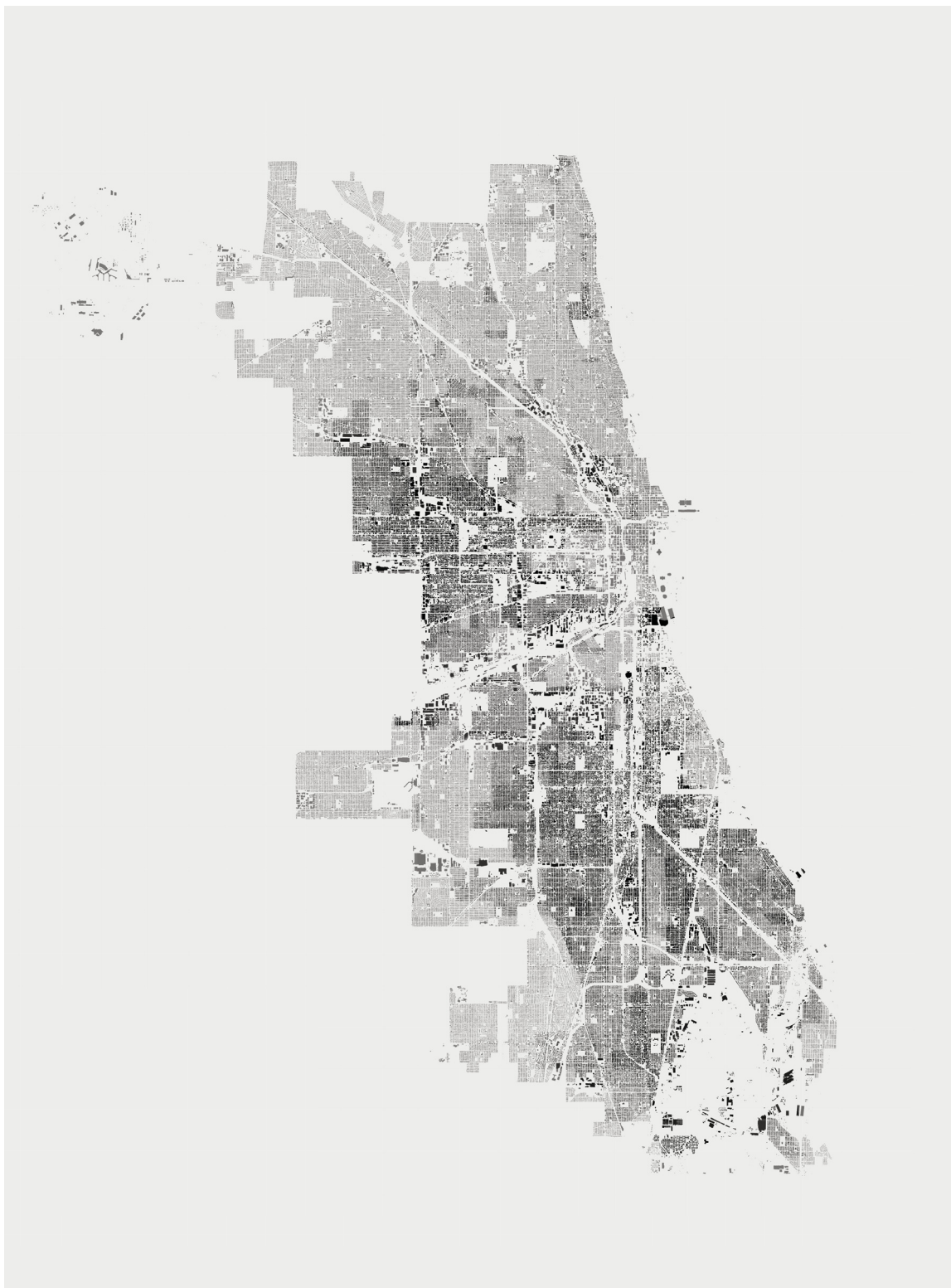
Although the power to mitigate violence appears reliant on the seemingly impossible task of addressing the deeply historically rooted social deficiencies, the ability to intervene is more approachable now than ever. Events in recent history have reoriented the parasitic nature of traditional social and environmental structures in a way that enlightens possibility of space-transformation based on architectural intervention strategies.

The most important of these events is a gang leadership takedown initiative that sought to dismantle the city's highly organized gang factions by targeting the respective factions leadership. In 2012 the Chicago Police Department (CPD) made effort and included the arrest and prosecution of major street gangs leadership (Heinzmann 2017). Although the operation was successful, the result culminated in the dispersion of gang activity into self-organizing groups of young individuals that lacked structure and accountability. Violence shifted from being fueled by highly organized drug trafficking resembling organizational characteristics similar to those of fortune 500 companies, to violence as means of gaining social acceptance by peers (Heinzmann 2017). This transformation of social dynamics also marks a transition from territorial-based killings to senseless killings committed by young individuals with a lack of guidance (Dennis 2009, 40). As confirmed by Dennis, youth are not only more likely to engage in delinquency and violence, but are also more likely to be victimized by crime (Dennis 2009, 38). Among more than 1,300 recorded homicides, 55% of the victims

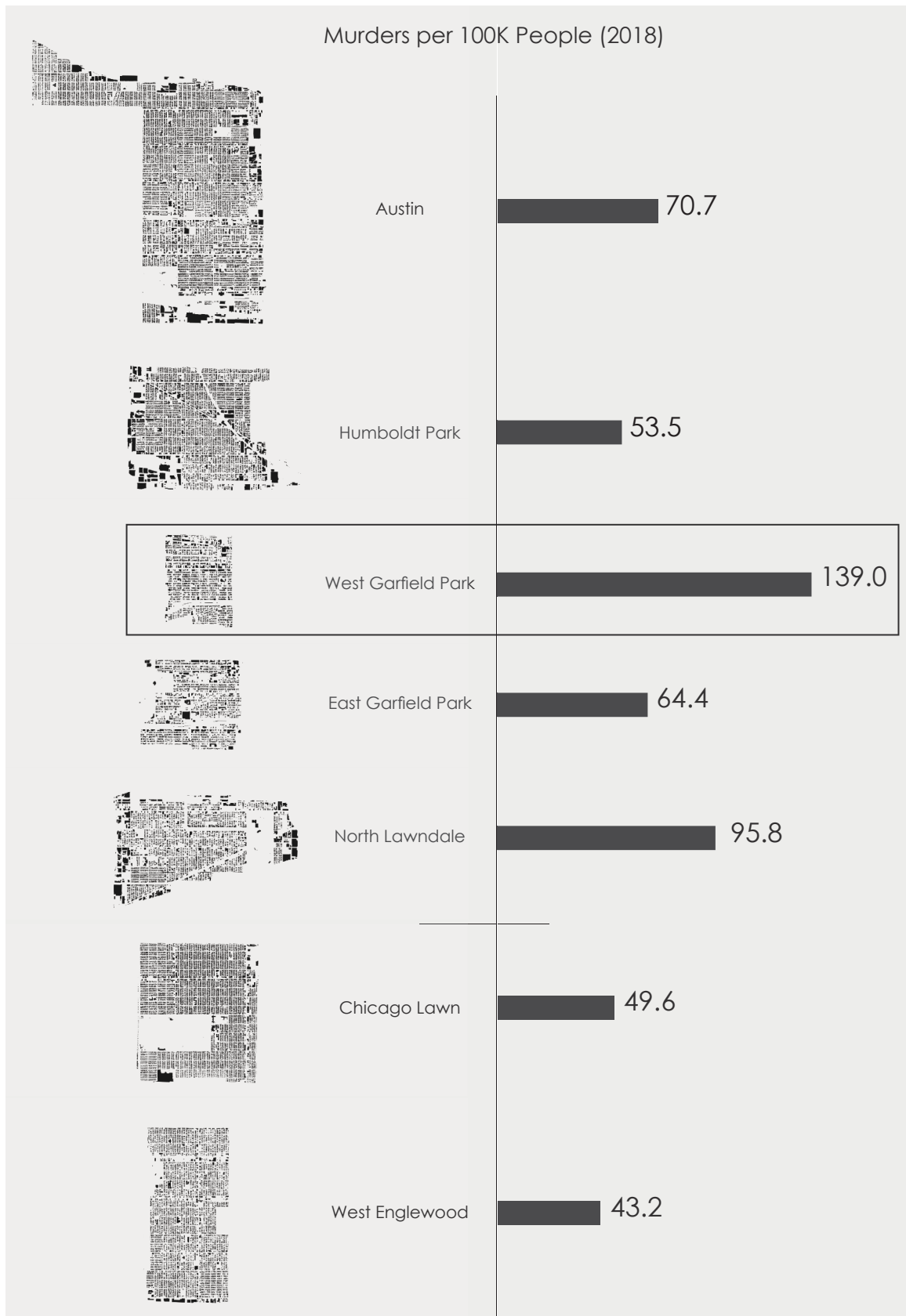
and more than 65% of offenders are 19 years or younger (81% and 91%, respectively, are younger than 25) (Dennis 2009, 40). The lack of social structure currently provides favourable conditions for alternative community and youth based approaches to gun violence mitigation. The introduction of a systematic architectural approach has the potential to mitigate violence through achieving the necessary balance in the production of new social spaces.

## **Community Areas**

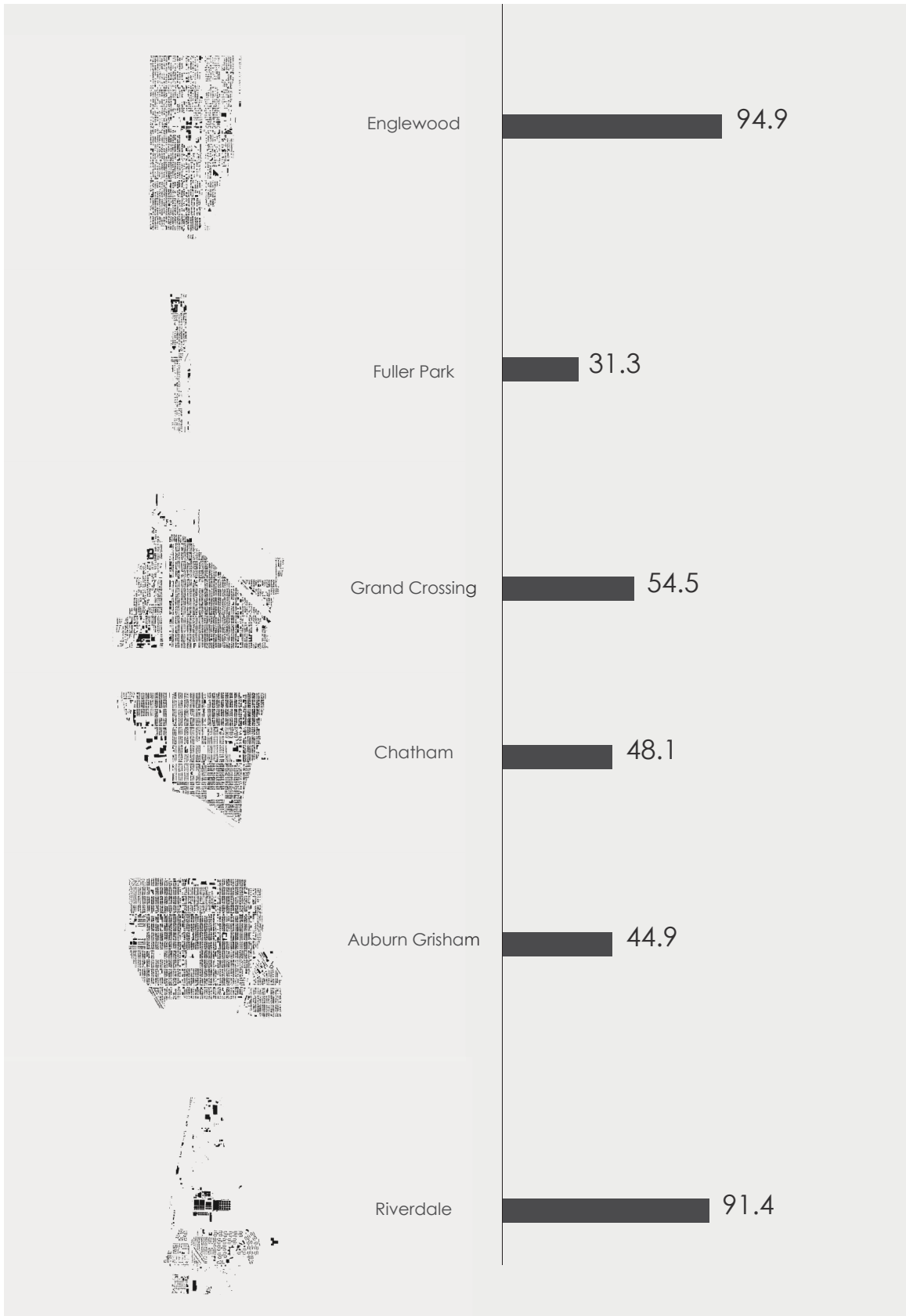
The extensive history of racial segregation, corrupt government planning policies, laws, and infrastructure projects, gang activity, social strife and economic turmoil culminates in a handful of violence-plagued neighborhoods, primarily on the South and West Sides of Chicago (Sampson 2013, 77). Of the 77 geographical community divisions in Chicago, the top ten most violent districts remain in these sides of the city (Earls 1995-97, 21). These include Austin, Humboldt Park, West Garfield Park, East Garfield Park, North Lawn-dale, Chicago Lawn, West Englewood, Englewood, Fuller Park, Grand Crossing, Chatham, Auburn Grisham, and Riverdale. Each of the above listed neighborhoods shares similar compositional characteristics in regards to race, age, income, home ownership, vacancy, and most notably murder rate. While all of the communities listed provide compositional characteristics suitable for the introduction of an architecturally base violence prevention strategy, the most applicable location based on murder rate, level of urban decay, location, existing initiatives, and social composition is West Garfield Park, which is further investigated in detail throughout this thesis.



Chicago Homicide Prevalence Map 2001-2018 (areas of increased color intensity correlate to higher homicide rates) (Chicago Data Portal).



Chicago Neighbourhoods | Murder Statistics (Chicago Data Portal).



Chicago Neighbourhoods | Murder Statistics (Chicago Data Portal).



## Site (Community)

West Garfield Park, one of the 77 community districts that make up Chicago Illinois, is located 5 miles West of the Loop (Chicago Business District). Depicted in the ‘West Garfield Park Statistics’ diagram and “Chicago - West Garfield Park Proximity Map”, the unremitting violence has had a significant impact on the overall well-being of the community and it’s inhabitants. As the cyclical process of violence and urban decay continues, vacant lots and abandoned buildings increasingly plague the neighborhood and its inhabitants.



Chicago - West Garfield Park Proximity Map (Chicago Data Portal)

Additionally, various factors such as high unemployment, high poverty rates, low home ownership and lack of economic and social support contribute to the lamentable statistics depicted in the “West Garfield Park Statistics” diagram.

As shown in the “West Garfield Park Statistics” diagram, the major factors contributing to violence and overall life expectancy in the area are social and behavioural. Therefore, while this thesis acknowledges various other possible factors such as lenient gun laws, tense law enforcement-inhabitant relationships and the influence of social media, the thesis framework and accompanying architectural interventions focus on the development and transformation of the leading social and economic factors contributing to violence in West Garfield Park.

In comparison to residents living in the downtown Chicago area, residents of West Garfield Park are...

6x

more likely to be unemployed

9x

more likely to be killed by a gun

57x

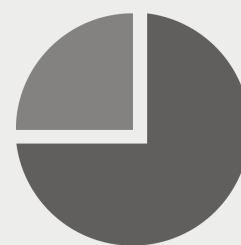
more likely to die by assault

The average life expectancy in West Garfield Park

16 years

less than the average loop resident (69 vs. 87)

Factors Contributing to Life Expectancy West Garfield Park



25%

75%

Genetic +  
Biological

Social +  
Behavioral

West Garfield Park Statistics (Chicago Magazine)

## CHAPTER 3: DESIGN: STRATEGY AND FRAMEWORK

The following design strategy analyzes the social, economic, and environmental processes that produce violent spaces. The goal is to envision architectural-based approaches suitable to the transformation of such spaces. The framework is broken into three divisions: Re(Claim), Re(Connect), and Re(Vitalize). Through understanding these divisions and how space is produced, distributed, and consumed, the framework is able to envision the most effective methods of spatial transformation. Methods are then implemented in the form of phased architectural interventions, each utilizing strategies focused on violence mitigation.

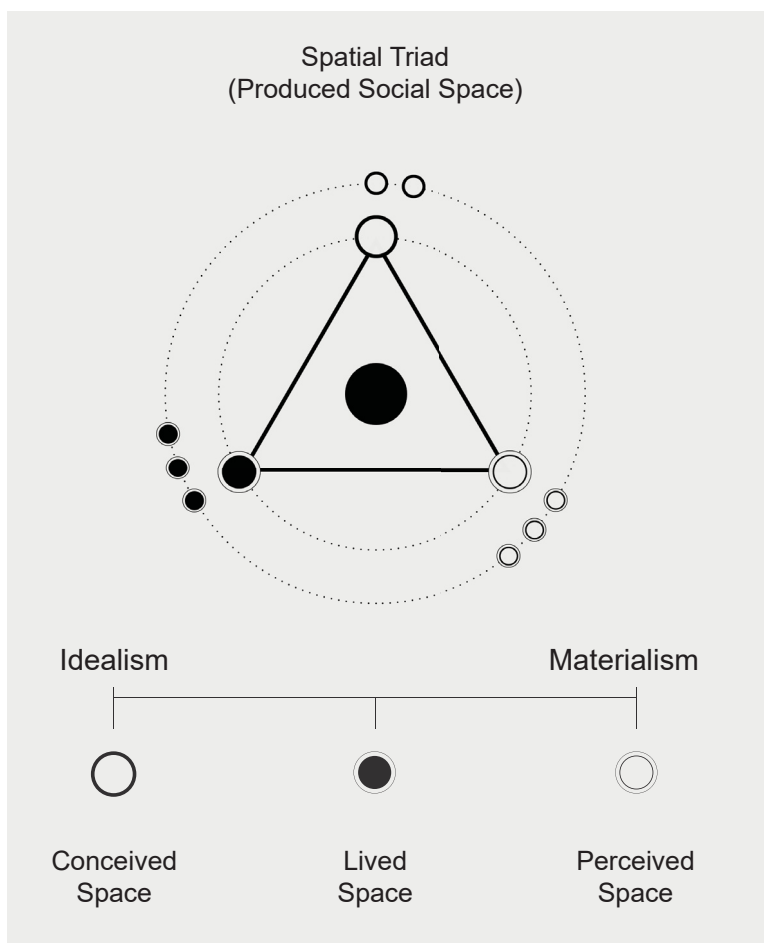
### **Re(Claim)**

Re(Claim) provides the first part of the framework which focuses on understanding and interpreting the socio-spatial processes that shape the built environment, how the resulting environment shapes the inhabitants, and how it can be reclaimed as a productive space able to mitigate violence.

Violence is primarily a social phenomenon, a trait that is passed on, adopted, enhanced and deduced over time through the interaction of individuals and their relationship to the built environment (Knox and Pinch 2013, 216). In order to propose methods of violence mitigation through spatial manipulation, it is essential to understand the socio-spatial processes that work to produce violent spaces in the first place. The foundation of this framework reinforces the notion that space is socially produced and therefore can be manipulated by understanding the multi-scalar socio-spatial

processes that lead to its production.

The primary theories governing the re(claim) section of the framework are a synthesis of socio-spatial theories from various disciplines, which provide the context necessary to establish a concise understanding of proper methods in which space can be manipulated and produced. These theories include Henri Lefebvre’s theory on the “Production of Space” and Shaw and McKay’s “Social Disorganization Theory”.



Lefebvre’s Spatial Triad (Understanding Henri Lefebvre 2004)

By reinterpreting Henri Lefebvre’s ‘Spatial Triad’ as presented in “The Production of Space”, this framework recognizes three different dimensions of discourse and knowledge

systems able to simultaneously claim a given organizational event – these spaces being Conceived Space (Representations of Space), Perceived Space (Spatial Practice), and Lived Space (Representational Space) (Elden 2011, 290). Lefebvre’s theory of the production of space is significant to this thesis for its ability to systematically integrate different categories of urban space into a single, comprehensive social theory. This enables the understanding and analysis of spatial processes at different levels (Goonewardena and Kipfer 2008, 27). For coherence and clarity of the overall framework and strategy intent, primary focus is given to Lefebvre’s concepts of conceived and perceived spaces.

‘Conceived Space’ is defined as the space of scientists, planners, urbanists, technocratic sub-dividers—all of whom identify what is lived and what is perceived with what is conceived. This is the dominant space in any society and is tied to the relations of production and to the “order” which those relations impose and hence to knowledge, to signs, to codes, and to “frontal” relations. Particularly important is the spatial ordering of towns and cities, as well as the individual buildings. (Kerr 1994, 26)

The isolation and analysis of the influence of conceived space in West Garfield Park provides significant insight into the underlying socio-spatial characteristics attributed to the development of violence in the area.

The inherent dominance of conceived space in the production of social spaces has had a detrimental influence on violence in the community of West Garfield Park. This influence is exhibited by the various mechanisms that were developed and employed to segregate Chicago through methods such as restrictive covenants, redlining, exclusionary zoning, urban renewal, interstate highway development, public housing development, aggressive policing tactics and a judicial system that exploits inequality.

These mechanisms are fundamental to the understanding of the ways in which the urban environment operates today. The impact of these 'mechanisms' has created spaces and forms that not only negatively impact local people, but also the environment they live in. The interpretations of Lefebvre's concept of 'conceived space' attribute the current social and spatial conditions in West Garfield Park to unequal distributions of power and capitalist forms of economic production. These interpretations are reaffirmed by Querrien and Constantin who state:

Urban space is conceived according to the logic of profit rather than principles of social necessity, well-being, and local interest, which involve participation and cooperation and collective governance by residents. The current situation is that urban and public space is deemed to be outside the scope of democratic debate and as such becomes a very powerful device of subjectivation, as it is used as a 'social machine' that codifies subjects according to different social norms and values, thereby creating hierarchies and segregation. (Querrien and Constantin 2013, 265)

It is these mechanisms that were historically used to segregate Chicago and divide inhabitants and their communities, the repercussions of which are still evident today.

In order to strengthen community and in turn mitigate violence, the re(claim) section of this framework encourages the departure from reliance on current dominant modes of production, towards a localized means of economic production that takes account of 'the social' (Petrescu and Trogal 2017, 21). This method of social production "draws on the contributions from large networks of people, enabled by social technologies, to create new kinds of wealth" (Petrescu and Trogal 2017, 21). Through instilling a sense of community, individuals are able to develop solidarity and kinship networks with whom they occupy the same common

territory.

The decaying conditions of West Garfield Park require urgent response to major societal issues, which the predominant economic model and associated modes of making (mainly focused on the accumulation of capital rather than the well-being of the greater society), are ineffective as they are regarded as inflexible and unjust (Petrescu and Trogal 2017, 21). As stated by Querrien and Constantin: “It is our work as architect-citizens to recodify and reterritorialise the fragments of urban space that have escaped from this generalized control through design and along monetary flows. We make spaces accessible for appropriation by users employing collective modes of management. These are spaces that could further generate other initiatives, producing rhizomatic dynamics through the dissemination of new ways of living toward collective resubjectivation practices” (Querrien and Constantin 2013, 265).

Additionally, the production and manipulation of space must be understood through people’s perceptions of space, both individually and collectively in a given context. Similarly to conceived space, understanding the ways in which space is perceived on individual and collective levels is fundamental in determining architectural solutions to mitigate the ways in which it is negatively appropriated.

‘Perceived Space’ is defined by Lefebvre as, “the spatial practice of a society secretes that society’s space; it produces and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it. Spatial practice embraces production and reproduction, and the particular locations and spatial sets characteristic

of each social formation. Spatial practice ensures continuity and some degree of cohesion” (Kerr 1994, 26).

As defined by Paul Knox:

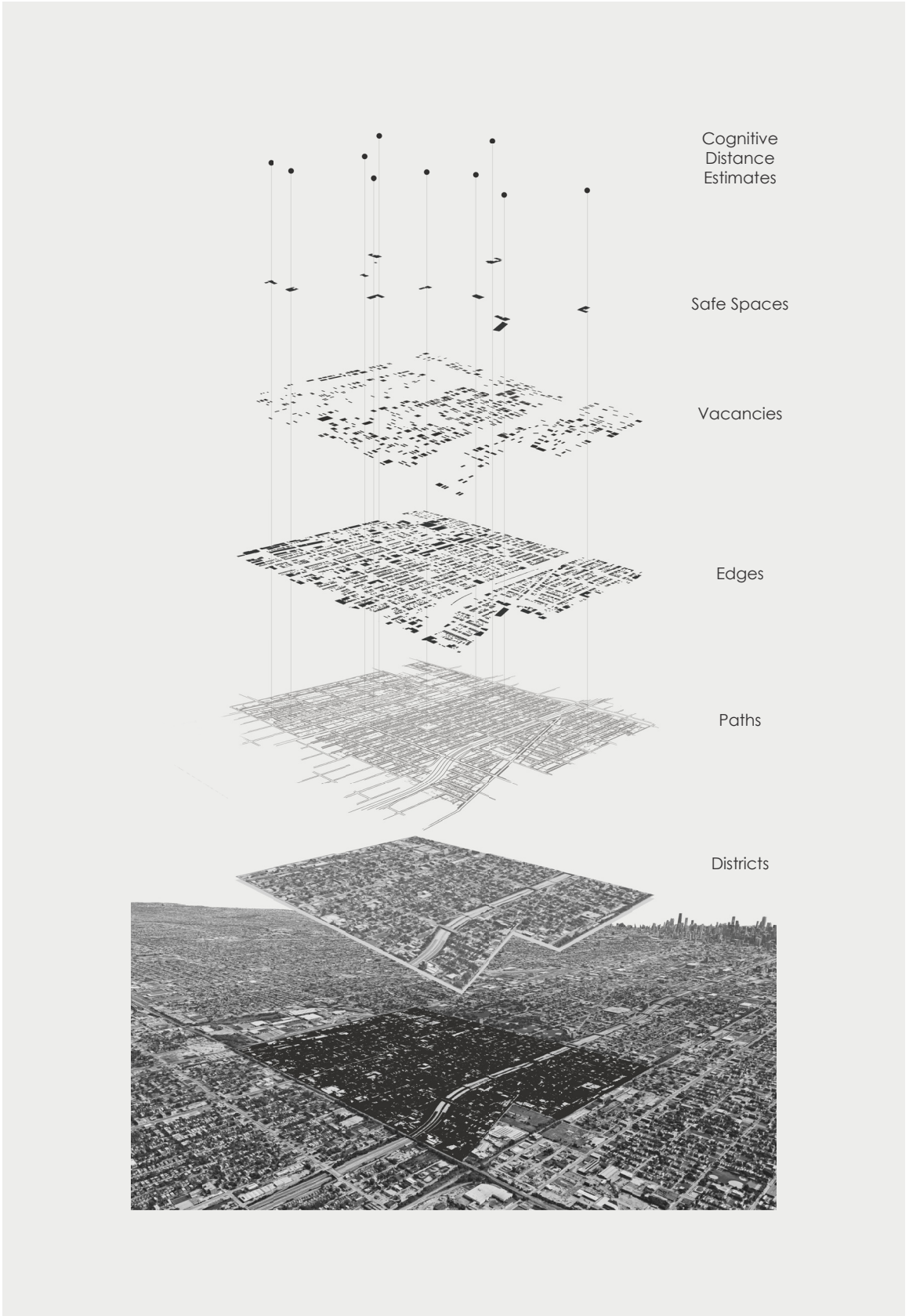
Cognition and perception are associated with images, inner representations, mental maps and schemata that are the result of processes in which personal experiences and values are used to filter the barrage of environmental stimuli to which the brain is subjected, allowing the mind to work with a partial, simplified (and often distorted) version of reality. (Knox and Pinch 2013, 225)

There are two distinct aspects (shown on pages 20 and 21) in which cognitive imagery constitutes the ways in which people perceive space, **I) Designative Aspects:** which relate to the mental or cognitive organization of space necessary to one's orientation within the urban environment, and **II) Appraisive Aspects,** which reflects people's feelings about the environment and which are related to decision making within the urban environment (Knox and Pinch 2013, 226). Another important aspect of perceived space is the concept of intersubjectivity, which are the shared meanings that are derived from the lived experience of everyday practice (Knox and Pinch, 196).

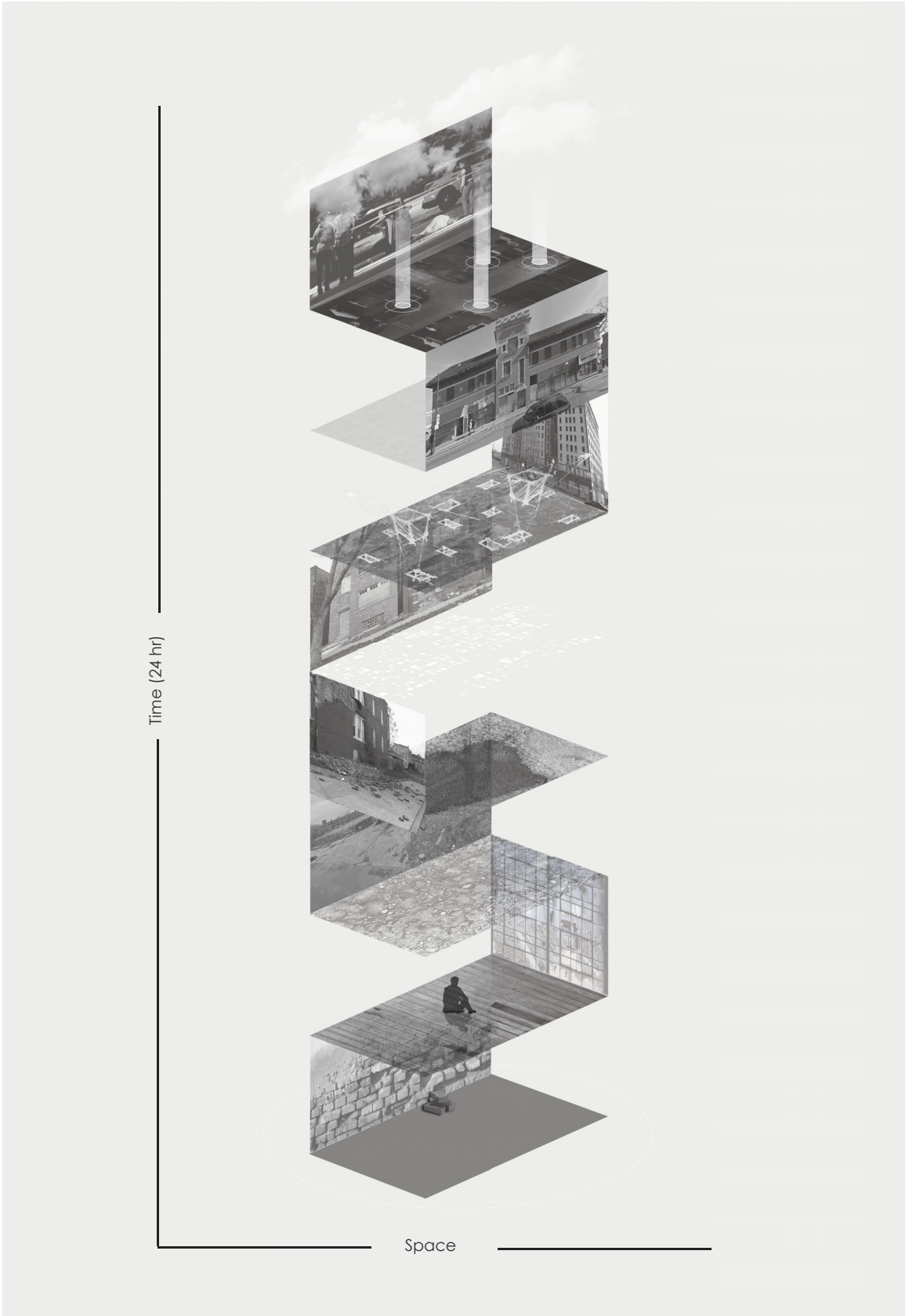


Urban Decay, West Garfield Park (Google Maps).





Representational Image - Perceived Space - Designative Aspects of Mental Imagery



Representational Image - Perceived Space - Appraisive Aspects of Mental Imagery

The rapid pace at which the process of urban decay effects many neighborhoods, such as West Garfield Park, results in vast areas plagued by vacant lots, abandoned homes and deteriorating infrastructure. The issues arise, among other things, from the lack of stable environmental stimuli in which people ordinarily create mental imageries from. These mental images are constructed and refined over time through a process of repetitive exposure and engagement. In West Garfield Park, the rapid rate at which key environmental stimuli are abandoned and demolished limits the ability for individuals to create stable mental imageries. The resulting conditions have the potential to develop misguided or even mythological perceptions of space in which violent behavior is accepted and prevalent (Knox and Pinch 2013, 212). These mythological perceptions of space are driven and exacerbated by various social and environmental conditions such as the presence of dilapidated and vacant spaces that act as environmental cues for certain kinds of behavior (Knox and Pinch 2013, 211).

In order to mitigate violence, the physical environment in which people generate negative spatial perceptions must be carefully transformed. This approach aims to address both designative and appraisive aspects of perceived space. Over time, initiatives that occupy the urban gaps will begin to constitute a method to strengthen cognitive perceptions of space. It is important that this process acts in conjunction with the goal of achieving intersubjectivity among community members through means of an architectural program that evokes a shared sense of belonging.

Through establishing a community based architectural program that stimulates social interaction and collective com-

munity engagement, individuals are able to subconsciously generate similar subjective opinions based on the shared conditions established by the architectural intervention. By generating intersubjectivity between community members architecture creates kinship and a feeling of inclusion that is essential in healthy neighborhood ecologies, and turn, violence mitigation.

### **Re(Connect)**

Re(Connect) establishes the second part of the framework-guiding design strategy which focuses on the current lack of community cohesion. This practice understands and interprets different types of community networks, and how fostering community networks through architectural intervention can be used to mitigate violence.

As explained, West Garfield Park has experienced decades of racial segregation, corrupt government planning policies, laws, and infrastructure projects, gang activity, social strife and economic turmoil, causing the deterioration of kinship networks necessary for safe and healthy community ecologies. A number of extensive neighbourhood studies have found that high homicide rates can be attributed to social disorganization such as neighborhood instability (Dennis 2009, 42). The breakdown of bonds between an individual and ones community is often referred to as "Anomie" (Olsen 1965, 40). This social condition has the ability to progress into violent and/or dysfunctional behaviour resulting from the inability of the individual to integrate into society (Olsen 1965, 39). In order to combat the current state of violence and further development of anomic behaviour, social networks must be developed using a bottom-up approach to neighbourhood regeneration (Querrien and Petcou 2013,

269). In hypersensitive communities such as West Garfield Park, the demand for urgent solutions extends beyond the capabilities of a top-down approach. Top-down approaches are able to utilize external government support but commonly prioritize monetary gain over localized social and economic well-being. The approach extends beyond aesthetic aspects of the built environment to encompass the major social, economic and cultural concerns that catalyze violence in West Garfield Park (Querrien and Petcou 2013, 269). Through the implementation of community network development theory, architecture evokes, maintains and expands the networks that emerge around socio-spatial processes, while simultaneously permitting the development of personal and collective relationships (Querrien and Petcou 2013, 266). As stated by Querrien and Petcou, “All social structures have spatial conditions and the making of new relationships will shape new spaces” (Petrescu and Trogal 2017, 183).

To begin re-establishing necessary individual and community networks it is crucial to understand their organizational spectrum. This thesis identifies three primary types of community networks: Centralized, Decentralized and Distributed (Baran 1962, 3).

### **Centralized Community Networks**

Centralized community networks maintain and develop relationships through a ‘central node’ or ‘hub’, which can either be an individual, an organization, or (in the case of this thesis) an architectural intervention. The central node acts as a point where individuals develop connections with the shared interest of the node. Centralized community networks are beneficial in creating specific outcomes and are

a favorable starting point in the development of strong community networks.

### Decentralized Community Networks

Decentralized community networks maintain the presence of a node, but utilize established relationships to create sub-nodes that become small centers of connection in themselves. Even with the introduction of the sub-nodes, individuals aren't usually connected between sub-nodes, but rather only through the central node. The natural transition from centralized to decentralized community networks further builds relationships necessary for healthy communities and begins to develop a shared identity.

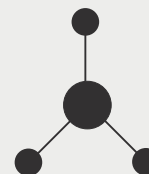
### Distributed Community Networks

Distributed community networks are the final stage in the spectrum of community networks. The distributed network no longer exhibits a hierarchy in nodes, but rather, is vastly connected through a web of relationships to every other node. This phase in community network development exhibits high level of shared identity, trust, and resilience and constitutes the final goal of this investigation.

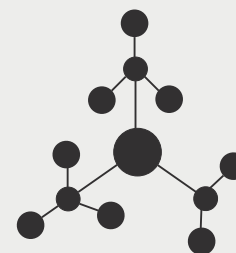
Throughout the community network development process, individuals within the community network of West Garfield Park develop relationships oriented towards sharing and development of community knowledge, tools, and processes that help support the long-term health of the whole community network.

The agency of applying the concepts of community network theory to the complex socio-spatial environments in West Garfield Park is profound as it can regenerate broken so-

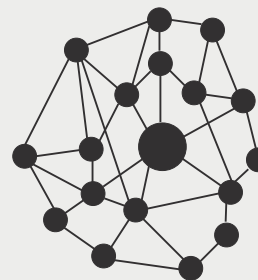
#### Community Network Distribution Diagrams



Centralized



Decentralized



Distributed

Community Network Diagrams

cial networks through the transition from individual action, to small group action, to collective and public action. The compounding processes of spatial transformation engage new users, new collective practices, and new everyday life practices (Querrien and Petcou 2013, 272). The community network theory neither assumes nor imposes a streamlined process to the development of complex social networks, but it utilizes the social and spatial transformations at a micro scale in order to construct complex and resilient networks capable of transforming environments of unremitting violence.

By utilizing the concepts of the community network theory the architecture proposed in this thesis acts as a catalyst to facilitate the development of community networks necessary for violence mitigation. As such, it is introduced in a successive process that gradually creates and re-defines social networks through the active involvement of inhabitants in developing collaborative practices and solidarity networks (Querrien and Petcou 2013, 263). Each intervention and phase defines its key role in the network development process as the catalyst for transition from one network formation to the next. The interventions not only act to establish the formation of new social networks, but simultaneously maintain and expand them.

### **Re(Vitalize)**

Re(Vitalize) provides the third part of the framework which focuses on understanding program development and justification of social and economic capitol creation and urban agriculture as means of violence mitigation.

Neighbourhoods that exhibit complex socio-spatial and

socio-economic dynamics, such as those present in West Garfield Park, require careful contextual consideration when determining transformative intervention strategies. As suggested by Draus, taking context seriously means recognizing the inherent influence of objective realities and subjective perceptions in shaping the attitudes, behaviors and therefore, the socio-spatial outcomes of individuals existing in hyper-sensitive neighbourhood environments (Draus 2013, 2528). Building upon that, the underlying success of a violence mitigation based architectural intervention strategy must provide programs that acknowledge and account for the existing problems, needs, vulnerabilities, resilience capacities, and public and social services of the specific population in question (Lucchi 2014, 13). Similarly, as the above mentioned characteristics of neighbourhood ecologies are described through their dynamic social, economic, and ecological processes, the physical architectures to support these constantly changing neighbourhood ecologies must be equally as flexible and adaptable as the environment in which they are placed. In order to ensure the necessary flexibility, the architectural program must inform a learning-based approach to community development that permits and promotes the accumulation of shared knowledge, tools, resources and services. Through building skills of individuals and the resilience of networks at the community level, the architectural intervention not only enhances the capacity for violence mitigation in its most urgent context, but also in future circumstances (Lucchi 2012, 8).

Derived from the analysis of the key social, economic, and contextual considerations previously identified as essential to violence mitigation through social network development in sensitive neighborhoods, the program demands a level



of dynamics, adaptability, and cultural cohesiveness that are most effectively executed through the focus on urban agriculture related strategies.

There is an extensive history of urban agriculture in the United States and North America with a recent rise in the implementation of urban agriculture as a mechanism for mitigating crime and violence (Mogk and Wiatkowski 2010, 1534). In addition to contextual appropriateness, the introduction of urban agriculture provides many additional benefits essential for violence mitigation such as urban improvement, economic revitalization, employment, education and job training opportunities, youth engagement and food security.

## **Benefits of Urban Agriculture**

### ***Urban Improvement***

Over the past 50 years, Chicago has experienced a significant level of urban decay so significant that city officials estimate that there are as many as 70,000 vacant lots in the city (Chicago Department of Environment 1997)” (Kaufman and Bailkey 2000, 25). Specifically in the case of West Garfield Park, this equates to an urban landscape plagued by over 3000 vacant and abandoned lots (Chicago Data Portal 2019). As stated in the ‘(Re)Claim’ section of the thesis framework, these sites have the potential to restructure the ways in which individuals perceive their physical environment as abundant with spaces where violent behavior is prevalent and accepted, to spaces where the public domain extends its power through social relationships and informal surveillance. Unattended, vacant lots become unsightly gaps in the urban fabric, while vacant houses become

negative environmental cues for violent behavior (Mogk and Wiatkowski 2010, 1534). Cultivating these blighted spaces not only has the potential to reduce criminal activity, but have the potential to attract new residents, and improve the well-being of current residents (Mogk and Wiatkowski 2010, 1533-34). As stated by Lovell, “The effect of greening the neighborhood alone is a positive outcome for all residents in terms of visual quality and human health and well-being” (Lovell 2010, 2501). These seemingly useless spaces offer significant potential for new forms of collective urban commons.

### ***Economic***

Essential to the development of resilient community networks is the potential for market-based approaches to urban agriculture. Urban/Community gardens differ from urban/community farms in that, “A community garden is a site, which may or may not be broken into individual plots, that are gardened by multiple people. Produce is consumed directly by the gardeners or shared/donated, but is not typically used to generate income. Where as an urban/community farm is a commercial venture where food is grown for sale or broader distribution rather than consumption by the grower” (Poulsen and Marie 2014, iii). Chicago provides promising economic agricultural adoption statistics as it contains, “both the largest core of entrepreneurial urban agriculture activities and the municipal structure closest to fully supporting city farming as an alternate use of vacant land.” (Kaufman and Bailkey 2000, 54).

The practice of urban farming not only provides a place of social interaction and collective community engagement, urban farming provides significant opportunities for localized

collective and individual economic recovery as well. While common speculation of governments and local community organizations undermine the economic potential of urban agriculture, the statistics shown in geographies with similar urban characteristics highlight the invaluable potential of market-based urban agriculture and its role in localized economic revitalization. "Approximately every \$1 invested in a community garden yields \$6 worth of fruits and vegetables" (Mogk and Wiatkowski 2010, 1531). Similar statistics expressed by Lovell demonstrate the economic potential of urban agriculture, "an urban farm in Milwaukee, Wisconsin, for example, grosses more than \$200,000 per acre (0.405 hectares)" (Lovell 2010, 2501). Additionally, "Urban farmers can gross up to \$90,000 per acre by selecting the right crops and growing techniques," and in Philadelphia it is estimated that "urban-market gardeners" earn up to \$68,000 per half acre" (Mogk and Wiatkowski 2010, 1531).

Compounding on the value added to local community organizations and producers through locally based economic recovery is the potential to expand the development of localized community networks. This encompasses surrounding communities and organizations through distribution to neighbouring grocery stores, markets and restaurants (Mogk and Wiatkowski 2010, 1531).

As noted above, there is significant potential of localized food systems to drive economic recovery and promote the creation of essential community networks. While collective well-being is central to the promotion of market-based urban agriculture, there are a number of individual economic incentives of urban farming that provide individuals (most notably youth), with compounding economic oppor-

tunities otherwise unavailable through other means of illegal income common in the area, such as drug dealing. While economic profits from drug dealing may be semi-lucrative for the common “foot soldier”, the access to locally based economic food production markets give youth the resources to create their own economic destiny using means alternative to drugs and violence. Although the economics alone might not be enough to convince youth of the benefits of urban agriculture, true value is found in the capacities of urban agriculture to generate a “safe” means of economic production. An environment that allows individuals to generate stable income sources while not having to actively focus on natural instincts of safety and survival has the potential to generate perceptions among youth that are far more valuable than the minor monetary advantages drug that dealing provides.

### ***Employment and Education***

West Garfield Park is among the communities in Chicago with the highest unemployment and poverty rates. Urban agriculture provides those actively seeking employment and/or job training with the ability to provide for themselves while simultaneously giving back to the community. This sentiment is shared by Lovell who states, “The entire community also benefits from the creation of new jobs for residents who struggle to find work, from opportunities to socialize and cooperate with friends and family, and from the environmental awareness that comes from a connection to an agroecological system” (Lovell 2010, 2502).

While the employment opportunities generated from urban agricultural-base land transformation are beneficial on a collective community scale, the program realizes it’s full value

in the ability to provide youth and young adults with various employment, education and job training programs - key elements in building resilient violence mitigation strategies. The transformative potential of urban agriculture in relation to violence mitigation through youth employment lies in its ability to provide physical environments where guidance, learning, and monetary earning potential keep youth occupied during times which would otherwise be spent developing violent behaviour. The active process of learning, cultivation, and profit generation has the potential to instill a feeling of self worth in individuals otherwise found through violent behaviour as means of peer approval (Mogk and Wiatkowski 2010, 1523).

Among commonly implemented strategies to mitigate violence in Chicago and areas of similar urban compositions, the creation of jobs, training and youth programming are a top priority of governments and community organizations. (Kaufman and Bailkey 2000, 63).

### ***Youth Engagement***

Similarly to the benefits outlined through youth employment and training, the adoption of urban agriculture provides substantial opportunities for youth engagement. Community gardens and farms have the potential to extend beyond the production of agricultural goods to include, “knowledge development in essential skills such as cooking, nutrition, science, environment, business management, and cultural sensitivity or understanding” (Lovell 2010, 2502). Additionally, “Urban agriculture benefits youth education, and community development through school programming, work programs, and other agriculture-related activities” (Mogk and Wiatkowski 2010, 1533).

The positive outcomes generated from youth oriented programming are beneficial to all members of the community (Lovell 2010, 2502). In addition to the potential reduction in homicide rates resulting from active engagement of youth in social and economic transformation, benefits experienced throughout the community exhibit value in the creation of robust cross-generational kinship networks, knowledge and training resources centres and relationships of economic potential.

### ***Food Security***

The poverty level in West Garfield Park is among the highest in the Cook County area. As a result, access to healthy and inexpensive food is scarce in the area and virtually inaccessible to the majority of adjacent and surrounding communities. While access to fresh food is commonly taken for granted in many inner-city neighbourhoods, “availability of fresh fruits, vegetables, and other foods for urban residents should not be underestimated, particularly in communities and neighborhoods where grocery stores and markets have moved out, leaving a —food desert” (Lovell 2010, 2501). The term “food desert refers to an area that lacks access to affordable and fresh produce, in which the barriers to access include distance to a supermarket, median household income, vehicle ownership rates, and a measure of the availability of healthy food at local businesses (Poulsen and Marie 2014, iii).

In the case of West Garfield Park, sections of the community classify as partial “food deserts”, while the majority of surrounding community districts classify as complete “food deserts”. In this case, the development of urban agriculture-related programs provides the inhabitants of West Garfield

park and surrounding communities with access to healthy and affordable food, while simultaneously developing cross-community networks essential for resilient violence mitigation strategies.

Additionally, many individuals and families living within the community utilize food banks and food stamps to supplement their budgets (Mogk and Wiatkowski 2010, 1527). In these cases urban agriculture could be an alternative or supplement to existing welfare or nutrition assistance programs (Lovell 2010, 2516). By engaging low-income families in the production of their own food, urban agriculture has the potential to improve their sense of empowerment, understanding of food nutrition, and their knowledge capacities for future agricultural production (Lovell 2010, 2516).

### **Constraints and Barriers to Urban Agriculture**

While the implementation and adoption of urban agriculture as means of violence mitigation proves promising, there are various constraints and barriers that are to be addressed in order to determine the viability of the proposed architectural intervention. The various obstacles fall under five common categories: access to suitable land, necessary education and training, government, individual and collective perceptions of urban agriculture and access to adequate resources and infrastructure.

#### ***Access to Suitable Land***

One of the most common barriers to the success of agricultural production in urban environments is access to available land. In many urban environments, land is considered a valuable commodity in which potential agricultural landscapes are more commonly considered as areas of ‘fu-

ture development' by developers, planners and community members (Lovell 2010, 2502).

This commonly encountered barrier does not pose similar issues in the context of West Garfield Park as a result of the significant level of urban decay in the area. The abundance of vacant land has had an economic effect on the area to the point that land value is seldom disputed. As confirmed by Mogk and Wiatkowski, “there is little to no market demand for new residential, commercial or industrial developments” (Mogk and Wiatkowski 2010, 1523).

The city of Chicago has acknowledged the re-use and productive capacity of the abundance of vacant spaces through the introduction of the “Large Lots Program” (Large Lots). The “Large Lots Program,” is a city-based initiative to sell vacant lots for \$1 to residents and neighbouring land owners living in the area (Large Lots). The program was



Large Lots Locations (largelots.org)



initiated to give local residents greater control over vacant land in their neighborhood, dispose of city-owned land efficiently, create wealth in the community, increase safety, raise property values and build community.

The architectural intervention in this thesis is able to utilize the introduction of the large lots program to co-inhabit these spaces as a way to help educate, assist, and empower recipients of lot purchasers, neighbours, and community members.

### ***Education + Training***

Another common barrier to the adoption and success of urban agriculture is the inherent lack of knowledge and training required to successfully run and manage market-base urban farms (Kaufman and Bailkey 2000, 60). As confirmed by Castillo and Winkle, “Food production is difficult and requires a significant amount of training to do effectively and efficiently “(Castillo and Winkle 2013, 161). This perception is often shared by government organizations and non-profits of whom local urban farmers regularly seek monetary assistance from in order to cover start-up costs (Kaufman and Bailkey 2000, 64).

Similarly, some residents and urban farmers shared the concern that urban farmers and interested individuals were not given the sufficient amount of time to get the operation started within the time frame of received grants (Kaufman and Bailkey 2000, 60).

Additionally, in order to operate and sustain market-based urban farming operations, local food producers need to attain Good Agricultural Practice (GAP) certification from the

US Department of Agriculture (USDA) (Castillo and Winkle 2013, 162). GAP certification is required to sell food through many distributors and is the primary method of ensuring safety of the food produced (Castillo and Winkle 2013, 162). The common barriers relating to certification lies in the lack of necessary resources and training facilities in Illinois (Castillo and Winkle 2013, 162). As a result, many urban farmers are not able to attain certification, and are restricted by the scalability and earning potential of existing operations.

In order to address the educational and training barriers, the architectural strategy promotes interventions that are conducive to the creation and distribution of knowledge based agricultural services for all individuals, while simultaneously providing spaces that allow individuals the opportunity to attain the proper certification in a time frame that is favorable to the success of the agricultural practice.

### ***Government***

Crucial to the success of an urban agriculture based architectural intervention strategy is the approval and assistance (both legal and monetary) of government organizations. As previously noted in the above sections, governments commonly see urban agriculture based environmental improvement strategies as last priority to job creation, youth engagement, and alternative land development uses.

As this is the case in many cities, Chicago has acknowledged the potential of urban agriculture as revitalization and crime mitigation through the previously mention large lots program, and most recently, a zoning reform in 2011 that made many types of urban agriculture permitted by right.

“This means that the zoning commission no longer needs to approve many types of urban farms and gardens, such as a greenhouse. Only a building permit is now required in a much streamlined process” (Castillo and Winkle 2013, 162).

Although further justification for the transformative benefits of urban agriculture should not need to be made, the potential for architectural intervention to assist in essential data collection is an additional incentive. Through developing previously discussed community networks using architectural intervention, “The urban agriculture gardeners/farmers themselves could be involved in the data collection by documenting their activities, tracking their inputs and yields, inventorying the plants, and spatial mapping of the garden site. Using the results of suitability analysis, land use inventories can be developed to map the suitable land to help increase institutional awareness and political support for urban agriculture (Lovell 2010, 2514). Similarly, the opportunity to attain government support for agricultural activities also exists to the general public, by encouraging residents to map the available spaces in their own neighbourhood, individuals can provide information desired by various government bodies (Lovell 2010, 2514).

### ***Perceptions***

A common barrier faced by many urban agriculture proposals is the way in which the proposed intervention is perceived by individuals, collective community bodies, and local organizations. These perceptions are based on various aspects, such as whether inhabitants see the intervention as beneficial to the community both visually and economically, how the intervention engages the effected individuals,

and the physical characteristics of the space itself (Poulsen and Marie 2014, 1).

The most common barrier urban farmers face in regards to how the proposed spaces are perceived, is the visual impact the garden has on the neighbourhood. Studies show that individuals are more inclined to promote visual improvement and beautification urban agriculture-related activities in their neighborhood over market-base interventions (Kaufman and Bailkey 2000, 60). While this is the case, given the appropriate time-frame, individuals become increasingly receptive to market-based urban farming interventions. (Kaufman and Bailkey 2000, 60). Given this barrier, it is crucial to the adoption and success of the architectural intervention that the phased implementation ensures an initial phase of beautification/visual improvement.

In relation to this thesis, the second most important perception-based barrier is the perception of community gardening among youth and young adults. Many young individuals in urban environments tend to associated agriculture and gardening as the domain of older adults, an activity that is unexciting and of little use to them (Kaufman and Bailkey 2000, 62).

In order to alter perceptions of youth, the architectural intervention is devised to engage a number of youth-based activities and provide young adults with access to the necessary resources to engage the full capacity of youth interest. Additionally, as mentioned in the employment section, the architectural program gives youth the tools to choose their own economic destiny.

### ***Adequate Resources and Infrastructure***

Lastly, another barrier faced is the lack of sufficient access to adequate resources and infrastructure necessary to sustain successful urban agricultural practices. As expressed by Lovell, “The successful integration of urban agriculture into the complex ecosystem of a city requires planning beyond the production sites themselves. Insufficient infrastructure and supportive services for the entire food system can severely limit the widespread adoption of these systems” (Lovell 2010, 2512).

The phased implementation of the proposed architecture is designed to provide physical interventions that are adequate for the adoption of urban agriculture in the area, allowing for a variety of other social, economic, and aesthetic benefits that are conducive to the construction of resilient and robust community networks through which violence is mitigated.

## **Case Studies**

While the implementation of urban-agriculture specific to violence mitigation is relatively new within the field of architecture, many architects and design firms have acknowledged the inherent value in urban agriculture based programs as means of utilizing and transforming physical spaces to promote the development of social and community networks. Below are a few of the many global approaches currently implemented.

### ***R-Urban***

R-Urban is a bottom-up strategy that explores the possibilities of enhancing the capacity of urban resilience by introducing a network of resident-run facilities to create complementarities between key fields of activity (economy, housing, urban agriculture, culture). R-Urban initiates locally closed ecological cycles that will support the emergence of alternative models of living, producing and consuming between the urban and the rural. This balance

between production and consumption through local sustainable sourcing can not occur without changes in the living and working lifestyles of citizens who must be involved in these changes through collaborative practices supporting each other through local networks. Flows, networks and circuits of production-consumption will be formed through these activities, with an emphasis on sustainability. R-Urban provides tools and resources to facilitate citizen involvement in this project, including accompanying emerging projects at local and regional levels that are working to meet the same ends. Agency R-Urban was established to steer the implementation of the first pilot units of production in Colombes, France which must act as a catalyst for the formation of local networks and practices around recycling and ecological-construction, urban agriculture and cooperative housing. (R-Urban)



Agrocite Urban Agriculture Intervention - (r-urban.net)



Agrocite Intervention - (r-urban.net)



Recyclab Intervention - (r-urban.net)



Agrocite Intervention - (r-urban.net)

## Passage 56

Passage 56 explores the possibilities of an urban interstice to be transformed into a collectively self-managed space. Initiated in 2006 in St. Blaise area, in the East of Paris, the project engaged a partnership between local government structures, local organisations, inhabitants of the area and a professional association which run training programmes in eco-construction. The management of the project gives space and time to construction, the construction site becoming itself a social and cultural act.

Parallely with the construction of the physical space, different social and cultural networks and relationships between the users and the actors involved are emerging. The project has an important take on the notion of proximity and active borders. Neighborhood walls transform the boundaries of the site into interactive devices, which rather than separating, multiply exchange and connections. Another strong take is on the ecological aspect: energetic autonomy, recycling, minimal ecological footprint, a compost laboratory. (Carrot City - Community & Knowledge 2014)



Passage 56 Intervention (Carrot City - Community & Knowledge 2014)



Passage 56 Intervention Site (Carrot City - Community & Knowledge 2014)



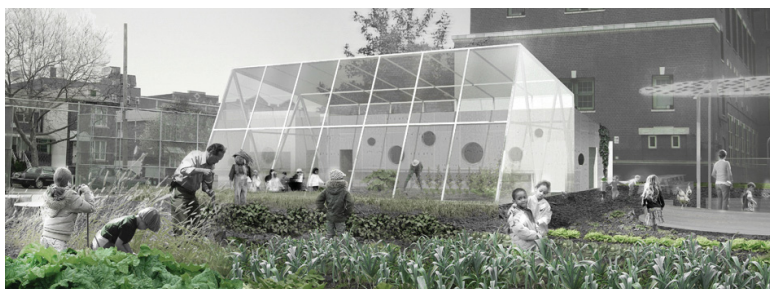
Passage 56 Intervention (Carrot City - Community & Knowledge 2014)

### ***Edible Schoolyard***

The Edible Schoolyard project began at the Martin Luther King Junior School in Berkeley, California, where a 0.4 ha organic garden and kitchen was created on an adjacent vacant lot. This acts as an interactive classroom used by teachers and specialist educators to integrate food systems into the core curriculum. The project has been successful in raising awareness about food issues in the Berkeley community where many other schools now have productive gardens, and was instrumental in the overhaul of the local school lunch program. The first Edible Schoolyard project in New York is being established in what was the parking lot at P.S. 216, the Arturo Toscanini School in Brooklyn.

The architects have shown the potential of good design to create a unique learning environment centered on food by integrating a series of inter-related architectural elements, providing special teaching spaces, to complement a 1000 m<sup>2</sup> organic productive garden to create learning, growing and cooking spaces that can function over the four seasons.

This project engages school children, their parents and the community in the process of food production, but also demonstrates the principles of self-sufficiency. It engages them in discussions about how the food system impacts on their health, nutrition and the environment. The project illustrates the value of good quality design in bringing these concepts to a wider audience and shows the potential of urban food and agriculture to enrich the educational experience and the learning environment. (Carrot City - Community & Knowledge 2014)



Edible Schoolyard Intervention (*Carrot City - Community & Knowledge 2014*)



Edible Schoolyard (*Carrot City - Community & Knowledge 2014*)



Edible Schoolyard (*Carrot City - Community & Knowledge 2014*)



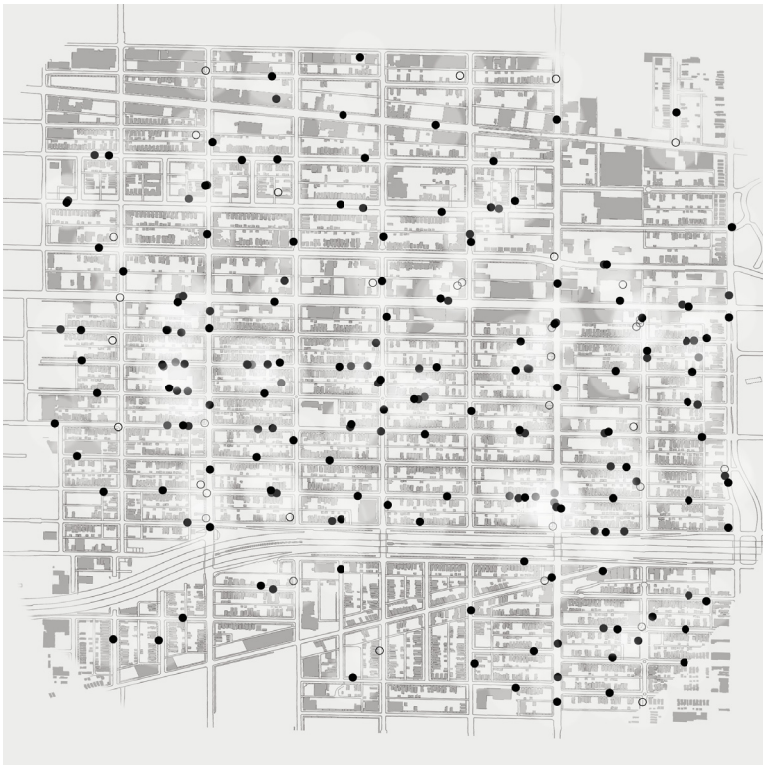
As stated by Lovell, "While urban agriculture alone cannot solve all of the problems we face today, this land use is certainly one of the more compelling and attainable strategies for improving a complex urban ecosystem" (Lovell 2010, 2516).

## CHAPTER 4: DESIGN: SITE

### Specific Site Selection

The level of urban decay within West Garfield Park is significant and widespread. The specific site selection for areas of intervention are based on a variety of social and environmental factors, such as empirical data provided by the West Garfield Park homicide map based on the occurrence and prevalence of violent activity, proximity to educational institutions to strengthen youth resources and networks, availability of underutilized \$1 lots and the presence of vacant lots or abandoned structures.

The primary quantitative factor that influenced specific site selection is the frequency and location of homicides in the West Garfield Park area. Although space and time are in a



West Garfield Park Homicide Map | 2006-2018 (Michael J. Petro - Chicago Criminal Defense Attorney)

constant process of change, the routinization and repetition of homicide locations over extended periods of time provides a solid foundation from which to determine intervention locations. Upon analysis, the repetition of homicide events over 12 years shows areas in which increased homicide activity is clustered. The existence of these clusters provides undeniable need for gun violence mitigation in these areas.

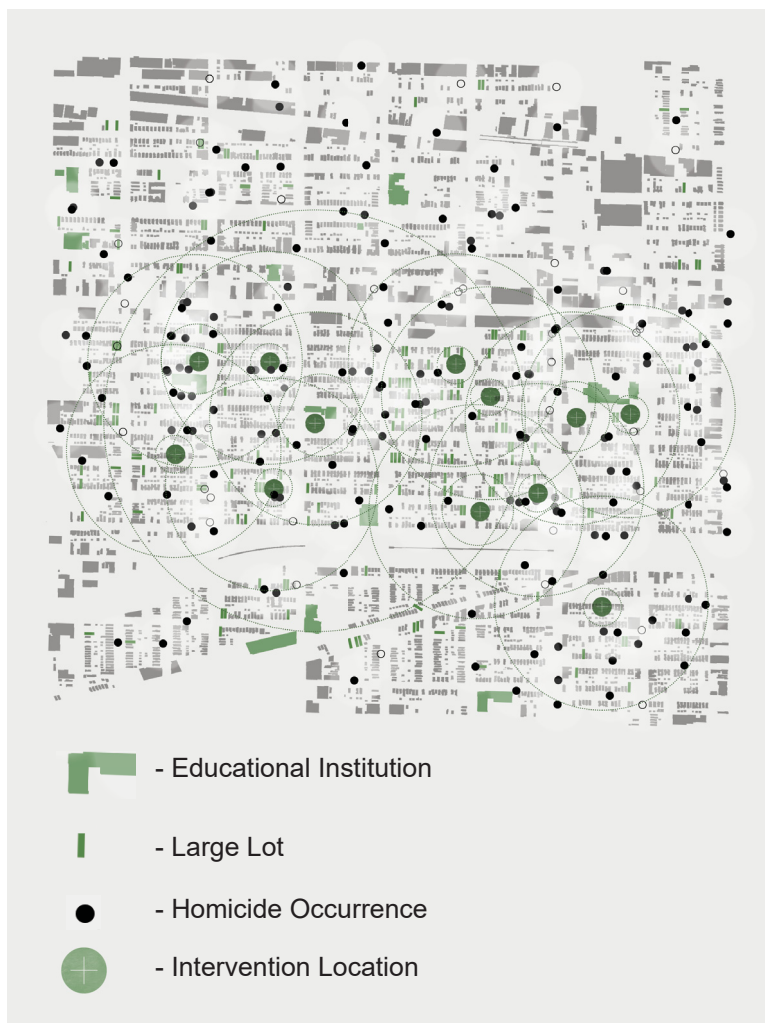
The second factor influencing the placement of the various architectural interventions is the proximity to primary and secondary educational institutions. Taking into account that the individuals most susceptible to developing, committing and being victims of violent behaviour in the area are youth and young adults, the various intervention sites for the beginning phases secure locations in close proximity to educational institutions in order to maximize the interventions's effective potential at mitigating violence through strengthening access to resources and developing resilient youth networks.

The third factor influencing intervention site selection is the availability and accessibility of underutilized vacant lots sold through the "Large Lots Program" previously mentioned. While some of these lots are transformed into productive spaces (as intended by the city), many remain vacant after purchase due to lack of education and awareness of proper urban agriculture procedures and preparation strategies. These sites provide essential services and site characteristics necessary for the implementation of the mobile systems in phase three of the community network development intervention strategy.

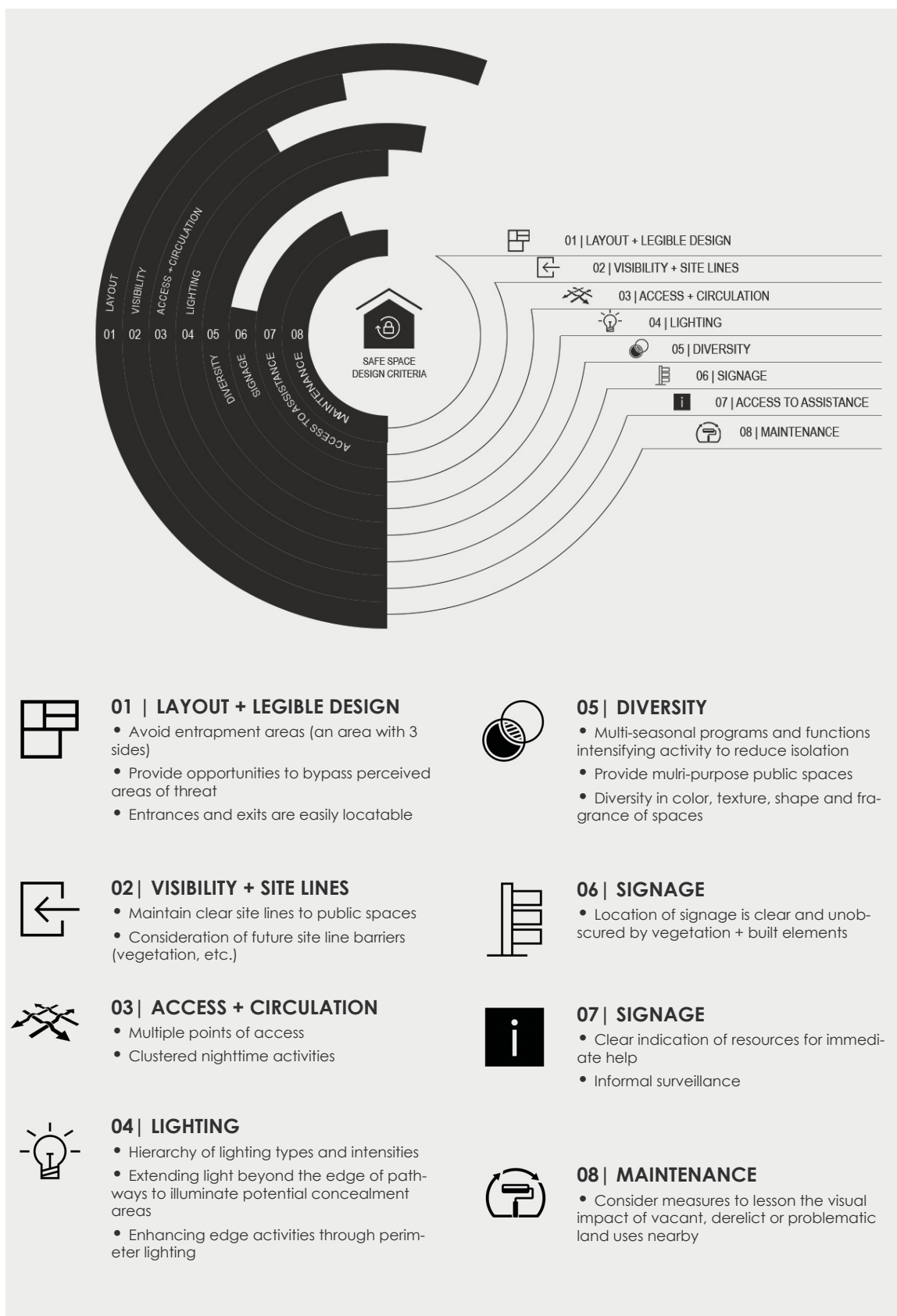
Finally, the fourth factor influencing site selection is the

presence of vacant lots and abandoned infrastructure. As mentioned in the “re(claim)” portion of the framework, these dilapidated environmental characteristics act negative cues for violent behaviour. The placement of architectural interventions in these locations is meant to offset or eliminate the negative environmental stimuli and reinforce positive images of built environment.

When acting in conjunction, these factors activate a variety of sites that aim to transform the social processes in which violent space is produced.



West Garfield Park Site Selection Factors Map | 2006-2018 (Michael J. Petro - Chicago Criminal Defense Attorney; largelots.org; Chicago Data Portal)



Safe Space Design Criteria Diagram

## **CHAPTER 5: DESIGN INTERVENTIONS**

### **Design Strategy**

The design strategy utilizes the information developed in the Re(Claim), Re(Connect), and Re(Vitalize) framework to propose a phased architectural intervention strategy aimed at mitigating violence. Each intervention acts as a catalyst for the creation of fundamental community networks while simultaneously altering perceptions that transform the social dynamics in which violence is spatially produced.

Additionally, the design strategy takes into account a simultaneous layer of violence mitigation through applying design guidelines focused on the establishment of “safe space” criteria. Developed in the diagram below, these criteria inform design decisions that influence the formal characteristics of the design interventions in order to mitigate the potential for violent behaviour.

### **Phase I: Memorial Gardens**

#### **Phase**

Phase I begins with the introduction of the memorial gardens. Specifically, phase I focuses on ensuring widespread adoption of the proposed program early in the phased intervention process, altering individuals perceptions of their environment through, and engaging local residents in community-based social practices. This intervention starts the transition from an environment of rampant violence and broken community networks, to a centralized community network structure. Three memorial gardens are distributed throughout the community and act as central nodes for the development of social relationships. These gardens attract



Community Network Diagram | Centralized

surrounding inhabitants further developing social networks, while simultaneously occupying previously vacant spaces.

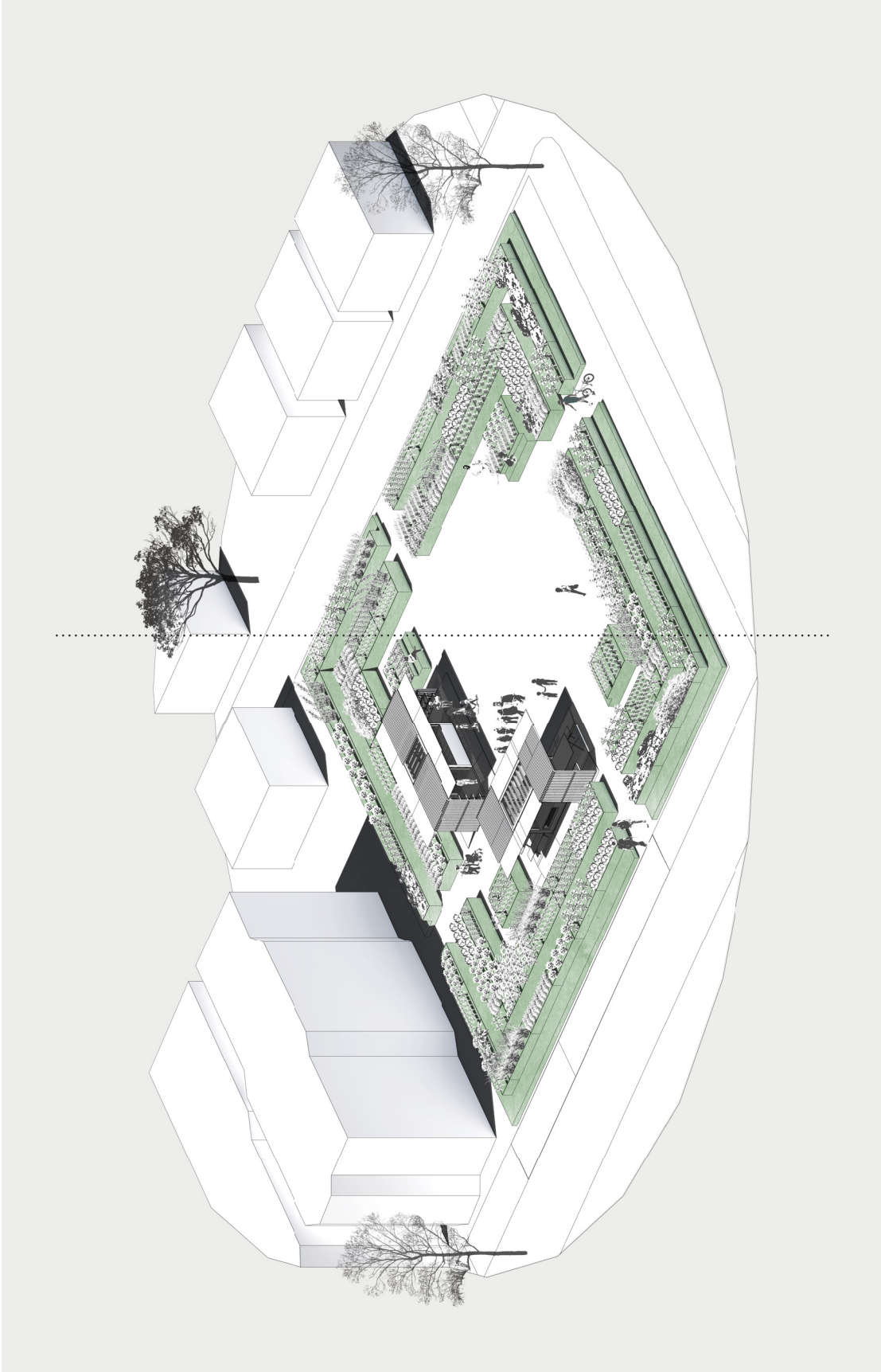
## Site

The specific site locations of the memorial gardens are strategically selected based on their combined proximity to educational institutions major transportation routes, and areas of reoccurring gun violence (shown on the West Garfield Park homicide map). These location characteristics are prioritized based on key concepts developed in the Re(Claim), Re(Connect) and Re(Vitalize) framework. As stated in the Re(Claim) portion of the framework, ones perception of their surrounding environment is developed and shaped by the presence of stable environmental cues. The memorial gardens placement on major transportation routes provides inhabitants the opportunity to generate stable mental perceptions of their surrounding environment through frequent exposure and familiarity with commonly travelled paths.

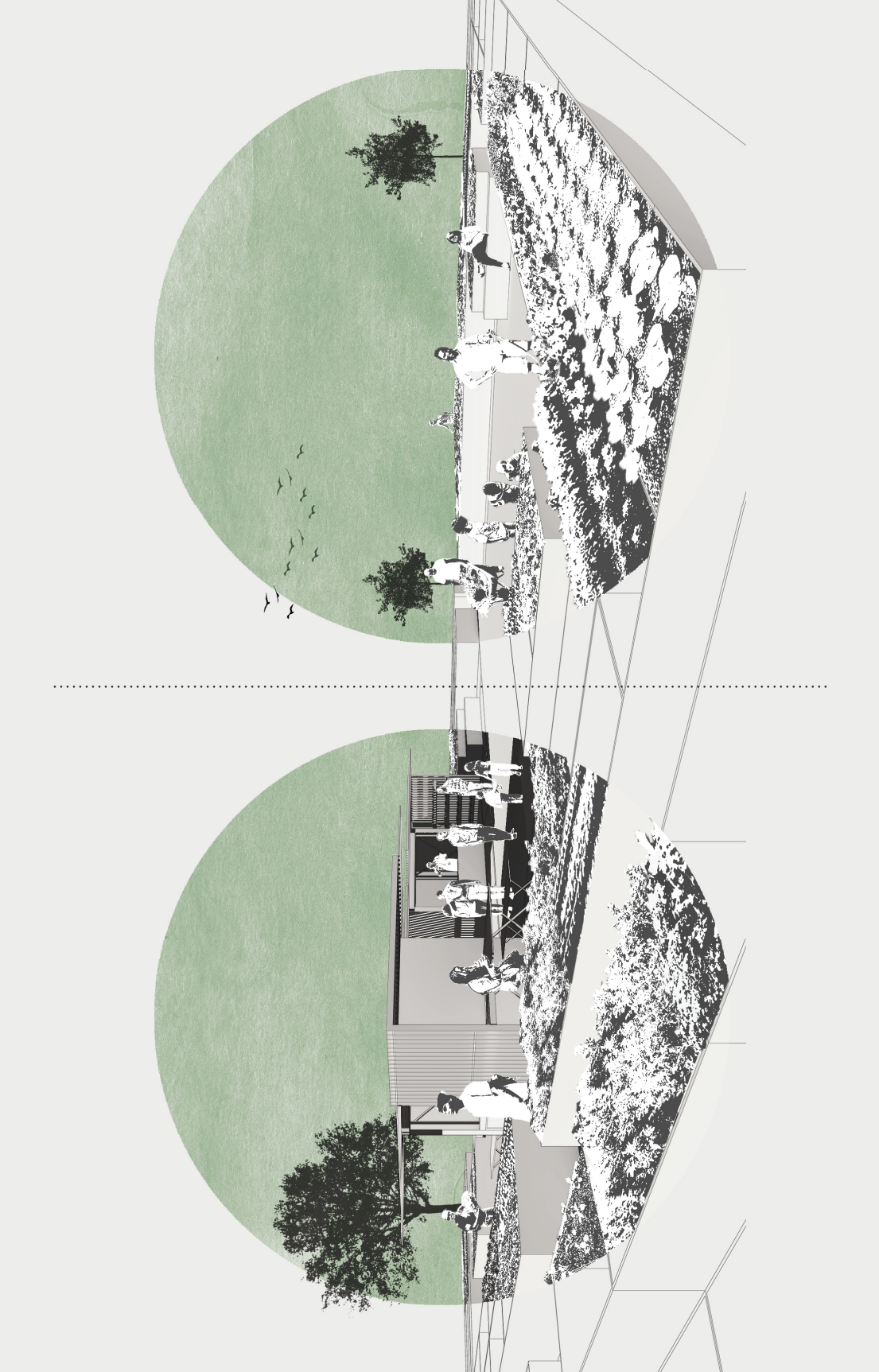


Memorial Gardens Site Location Map





Memorial Farm/Garden Site



Memorial Farm (Left) and Memorial Garden (Right)

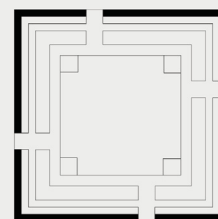
## Purpose

The memorial gardens transform the spaces that were previously sites of unremitting violence into spaces of sanctuary and community. Accompanying transformation of the built environment, is the inherent purpose of the memorial gardens to generate shared perceptions of new spatial characteristics.

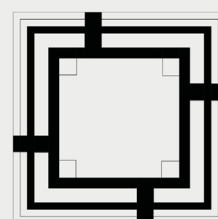
## Design

The spatial design qualities of the memorial garden re-introduce a sense of community in an otherwise chaotic environment. Upon entry into the garden you are confronted with elements that evoke a sense of remembrance. The following which the semi-prescribed circulation path then guides the individual through a network of vegetation towards a central common space in the middle of the garden. As outlined in the “Safe Space Design Criteria” diagram, the memorial garden ensures clear site lines to public spaces, various opportunities to bypass perceived areas of threat, easily locatable entries and exits, enhanced edge activities and minimal number of entrapment areas. While the central common area of the garden acts as a space of flexibility open to appropriation for various programs, it most commonly acts as a point of social and cultural exchange.

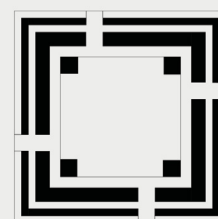
The implementation of the memorial garden is most effective as the starting point in developing community networks and turn mitigating violence because of its simplicity, likelihood of community acceptance and economic feasibility. Upon introduction of urban agriculture-related programs into sensitive urban environments, individuals are more receptive to the introduction of community beautification pro-



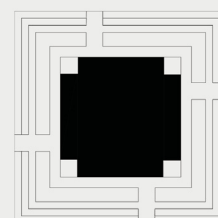
Memorial Ribbon



Circulation



Cultivation Space



Common Area

Program Diagram

grams over market gardening.

Additionally, the garden provides youth/children with safe outdoor spaces to play, learn and develop positive behaviors sheltered from violence, while providing a casual setting for community interaction.

## **Phase II: Urban Agriculture Business Incubator**

### **Phase**

Phase II is started with the introduction of the agricultural business incubator. Phase II utilizes the concepts developed in the Re(Claim), Re(Connect), Re(Vitalize) framework to firstly, initiate the shift towards a localized economy. Second, it is used as means to engage unaccountable youth through high tech agricultural activities and economic incentives. Third, the incubator alters perceptions by instilling feelings of ownership and accountability through its structural design qualities. And fourth, to further develop necessary community networks. The incubator acts as the catalyst in the transition from a centralized to decentralized community network. The introduction of the incubator into the system takes place as the central node through which the networks developed by the memorial gardens become sub nodes and are connected to each other through access to the agricultural incubator.

The economic logistics of the incubator utilize the incentives of violence mitigation, economic revitalization and social transformation to receive funding for construction through the combined support of governments, non-profit organizations, community initiatives, fundraisers, tax-increment-funding subsidies, land sale and private donors.



Community Network Diagram | Decentralized



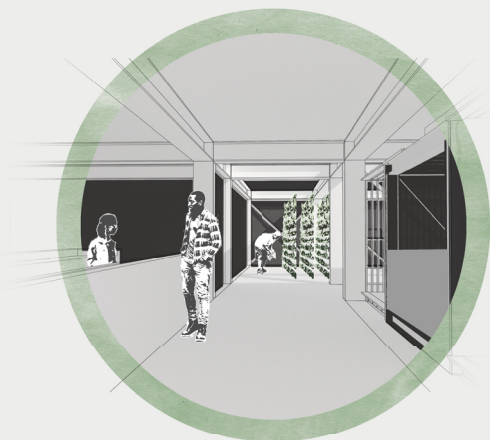
Agricultural Business Incubator



Courtyard



Second Level



Third Level



Agricultural Business Incubator Site Location Map

### **Site**

Similarly to the memorial gardens, the incubator site is strategically located based on its combined proximity to educational institutions, major transportation routes, and areas of reoccurring gun violence. Its purposeful placement directly adjacent to the abandoned Goldblatt Elementary School and St. Mel and Holy Ghost High School is based on its potential to assist in the re-activation of the school complex.

### **Purpose**

While the incubator promotes activation of social networks through community oriented spaces and programs, the primary goal of the incubator is to provide youth the knowledge, tools, resources and spaces to succeed in the unfavorable environments of West Garfield Park.

Additionally, the incubator houses the modular incubator



Pods introduced in phase III. These pods act as mobile rooms within the incubator space and are designed to be mobile in order to transport to their various sites (see phase III). The incubator facilitates the preparation, execution and transportation of the pods to their respective locations.

## **Design**

The incubator is designed in a way that promotes collective community engagement through network development, education and training, point of economic distribution and youth oriented development and success.

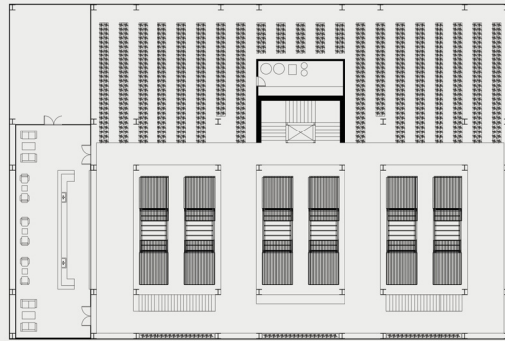
## **Program**

The main level is oriented towards community-based programs and youth engagement. It houses an educational area, community kitchen, and large flex space designed for weekly farmers markets and community events.

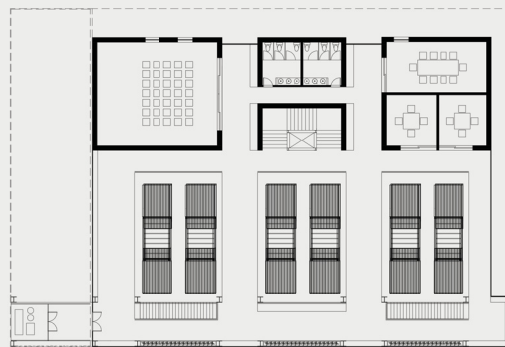
The second and third levels house the modular incubator pods introduced in phase 3. These levels are designed for the efficient and frequent movement of the pods within the space and for loading and unloading. The second level is dedicated to the hosting of pods related to the education and distribution of agricultural related goods and services.

The third level is dedicated to hosting pods dedicated to hydroponic (growing plants without soil using nutrient rich water) and agricultural food production.

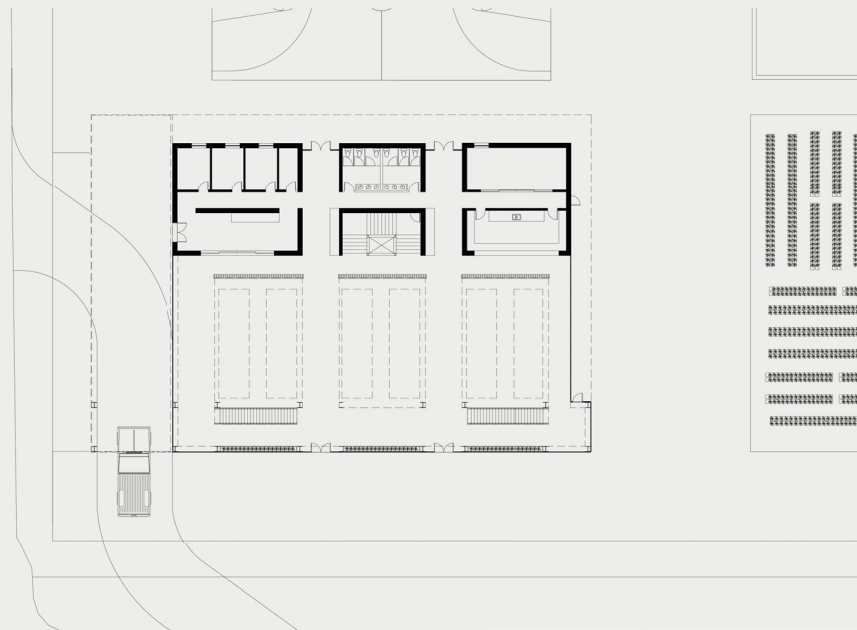
The mobile-nature of the pods is crucial to their eventual distribution and placement in vacant lots throughout the community. In their stationary positions, the otherwise mobile pods act as incubator rooms within the space.



Third Floor | Production

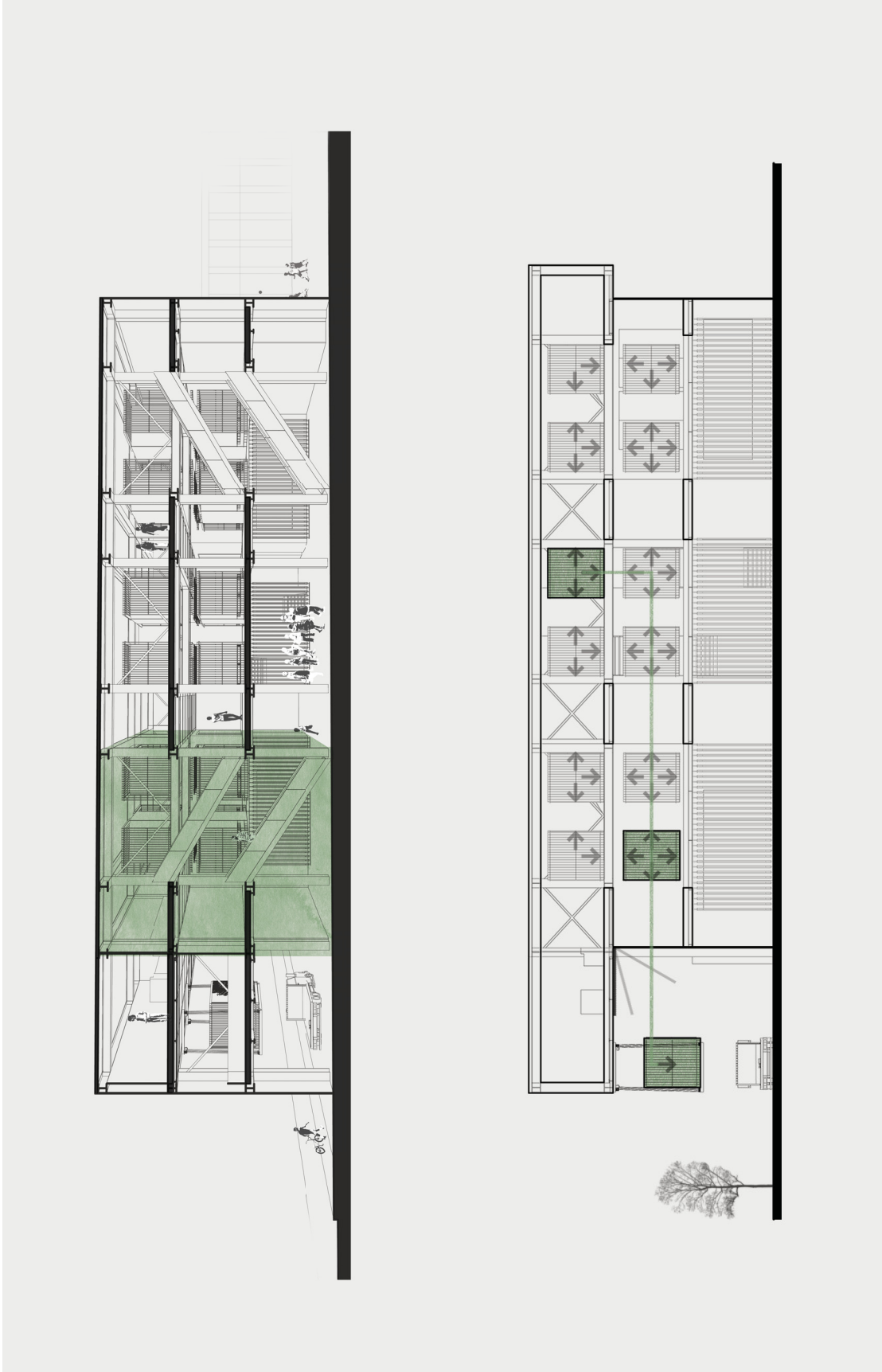


Second Floor | Education + Distribution

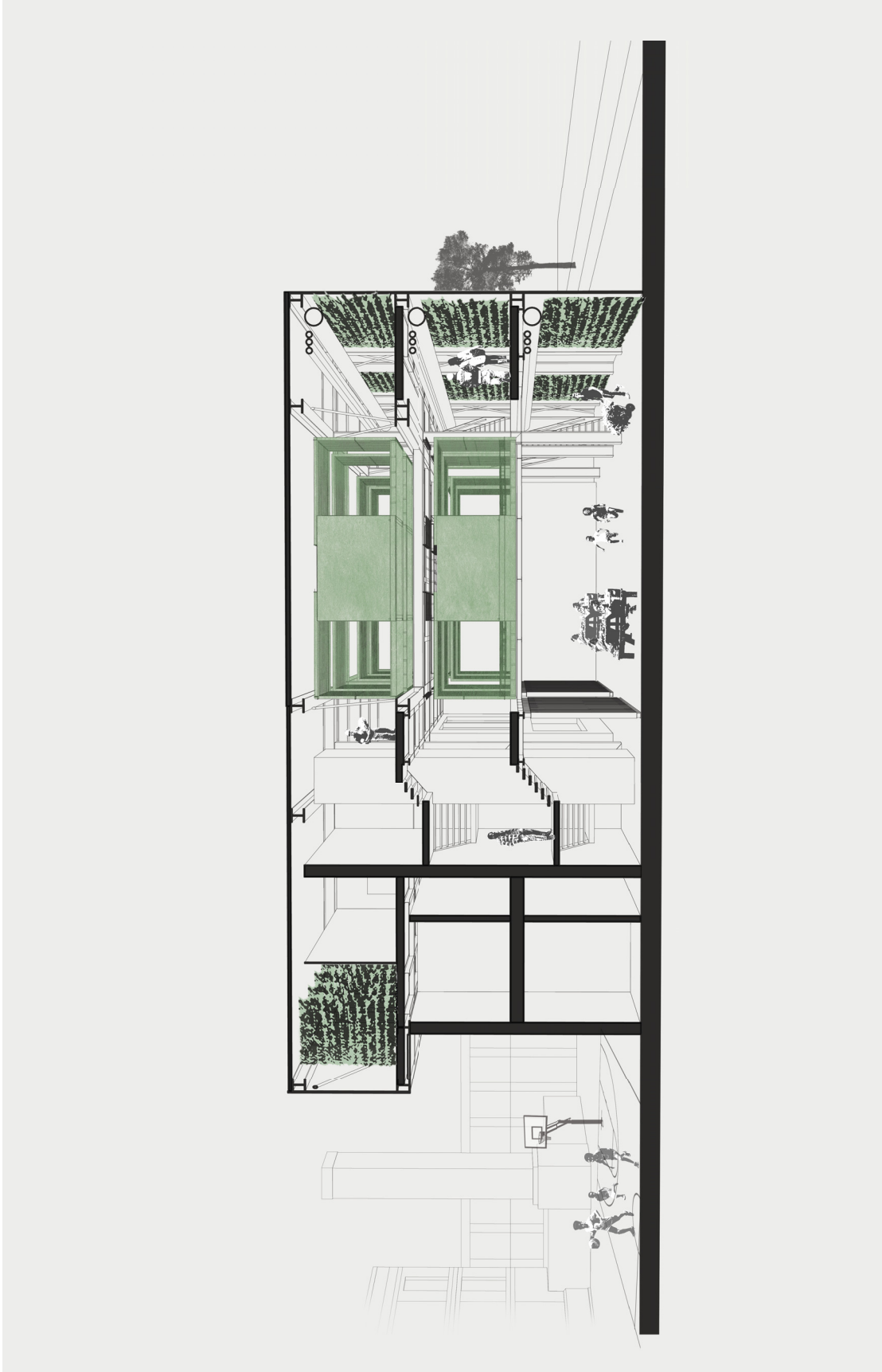


First Floor | Community + Youth

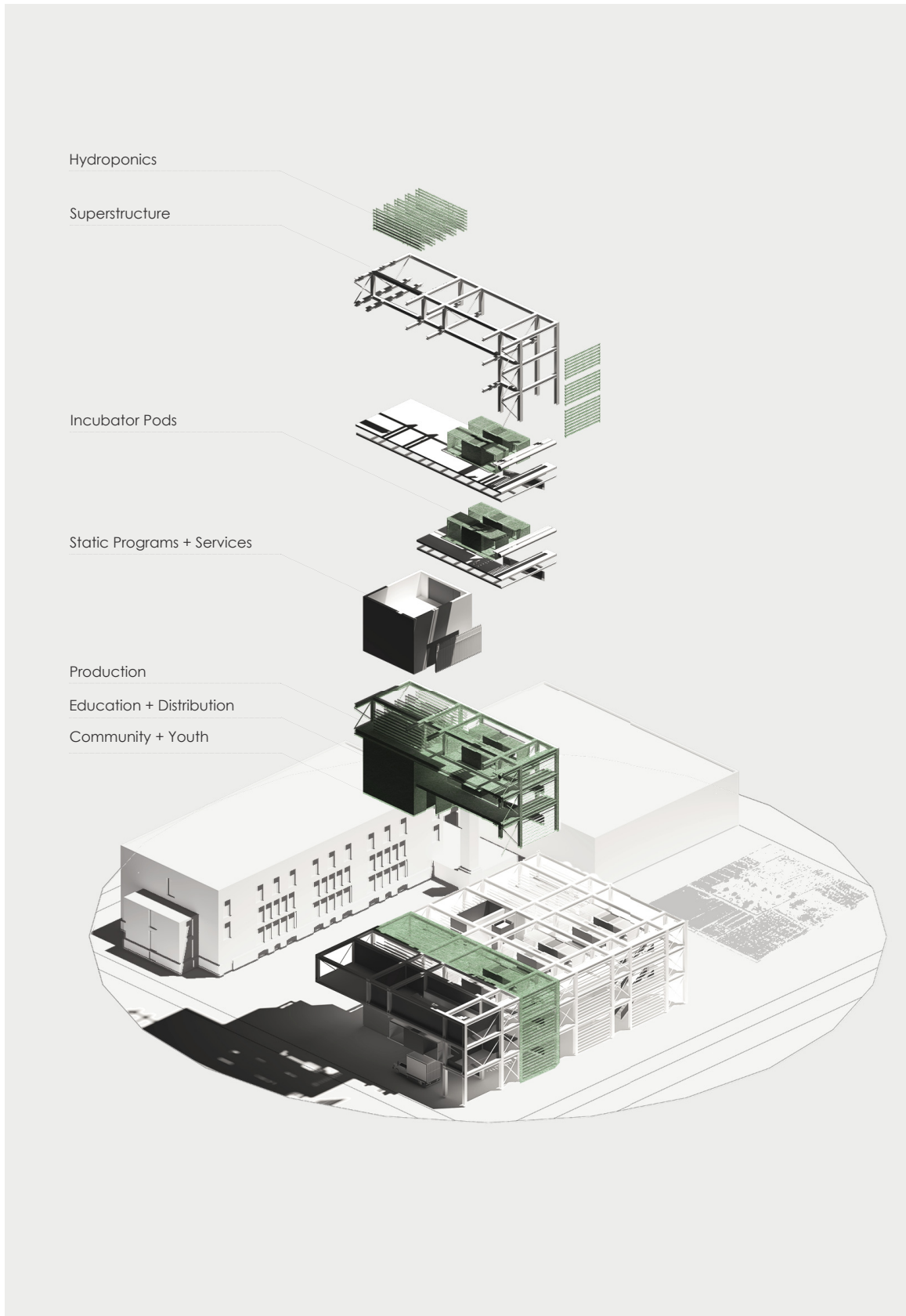
Agricultural Business Incubator Floor Plans



Agricultural Business Incubator | Elongated Section (Top) + Incubator Pod Movement Diagram (Bottom)



Agricultural Business Incubator Cross-Section



Agricultural Incubator | Exploded Axo

The circulation, layout, and flexibility of the space promotes the hosting of weekly farmers markets that can be held year round.

A common barrier to the success of market urban agriculture initiatives is the lack of education, training and certification to sustain and manage such operations. While it is unconventional for larger structures to be implemented in the middle of a successive intervention strategy, the time provided between phase 2 and phase 3 allows the currently housed incubator pod businesses to acquire the necessary education, certification, and training before being placed in the community to provide similar education, training, and economic initiatives to local community members.

### **Structure**

The construction and formal qualities of the agriculture business incubator are derived from principles of safe space design, defensible space and cultural appropriateness and agricultural necessity.



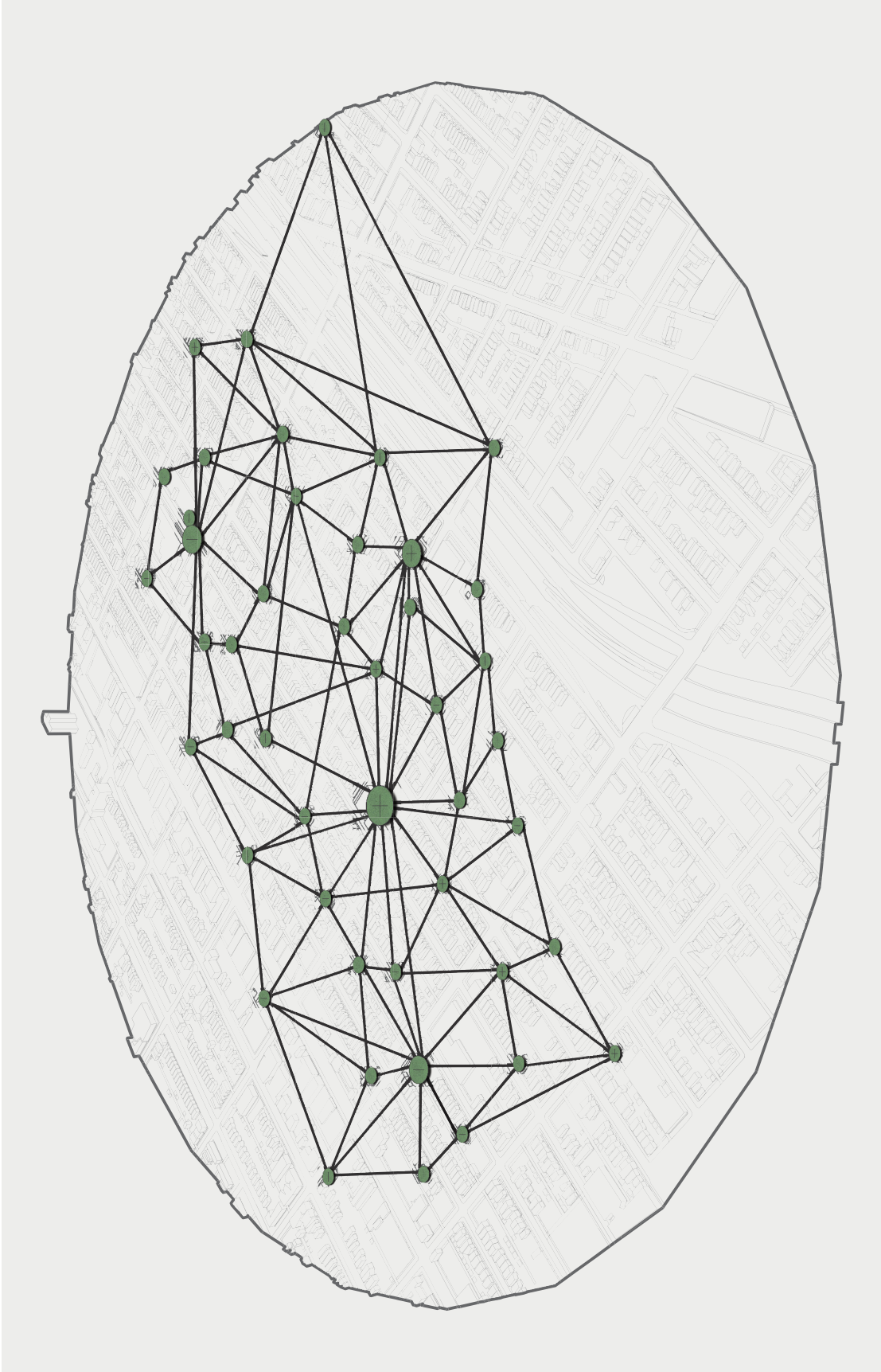
Common Chicago Greystone Outback Porch (The Historic Chicago Greystone)

In addition to promoting efficient movement of the incubator pods, the structure of incubator shares its formalities and structural qualities with the “outback porch” of the common Chicago Greystone house (shown in the image). As stated by Barnes, “the porch is one of the most recognizable symbols in the history of the traditional American home. From historic shotgun homes in New Orleans to bungalow homes in Chicago, the porch has been a key space of congregation for African-Americans” (Barnes 2018). It is a fixture in American life and among African-Americans that poses great cultural significance (On the Front Porch, Black Life in Full View 2018).

Based on concepts of Newman’s defensible space theory and Lefebvre’s concept of perceived space, these similarities are derived to promote a feeling of ownership and belonging. By creating environments that the inhabitants perceive as extensions of the home, individuals develop emotional connections to the space and begin to develop a sense of accountability for the spaces themselves and the events that occur within and around them.

The use of architecture in developing perceptions of ownership and accountability is key in mitigating violence in a community who’s problems partially stem from low home ownership and unaccountable youth.

The monolithic-blocks provide the support for the structure, while imbuing material characteristics that resemble the surrounding residential typologies. The brick construction draws similar proportions of its north-facing facade to the neighboring school in order to create a sense of continuity and familiarity.



Community Network Diagram | Semi-Distributed



## **Phase III: Modular Incubator Pods**

### **Phase**

Moving into phase III, the transition is catalyzed by the introduction and distribution of the modular pods into the community network development process. Phase III implements the concepts developed in the thesis framework through altering perceptions by reclaiming vacant and underutilized spaces, developing a strong localized economy, engaging and educating youth and community through various agricultural and economic incentives, and further catalyzing the growth of essential community kinship networks.

The pods provide the necessary resources in the transition from a decentralized community network to a distributed community network. Upon transition to a distributed network, there is no longer a hierarchy in the importance of each individual nodes ability to develop social networks, rather the modular incubator pods, incubator, and memorial gardens now act as individual nodes connected through previously established networks developed in phases I and II.

### **Site**

Differing from the permanence of the memorial gardens and the agricultural-business incubator as means of providing stable environmental cues for coherent mental map generation, the incubator pods are designed to be as efficient and mobile as possible as means of activating vacant spaces.

The specific locations of the incubator pods are derived from a city-based initiative to sell vacant lots for \$1 to neighboring residents living in the area (as shown on the map). While

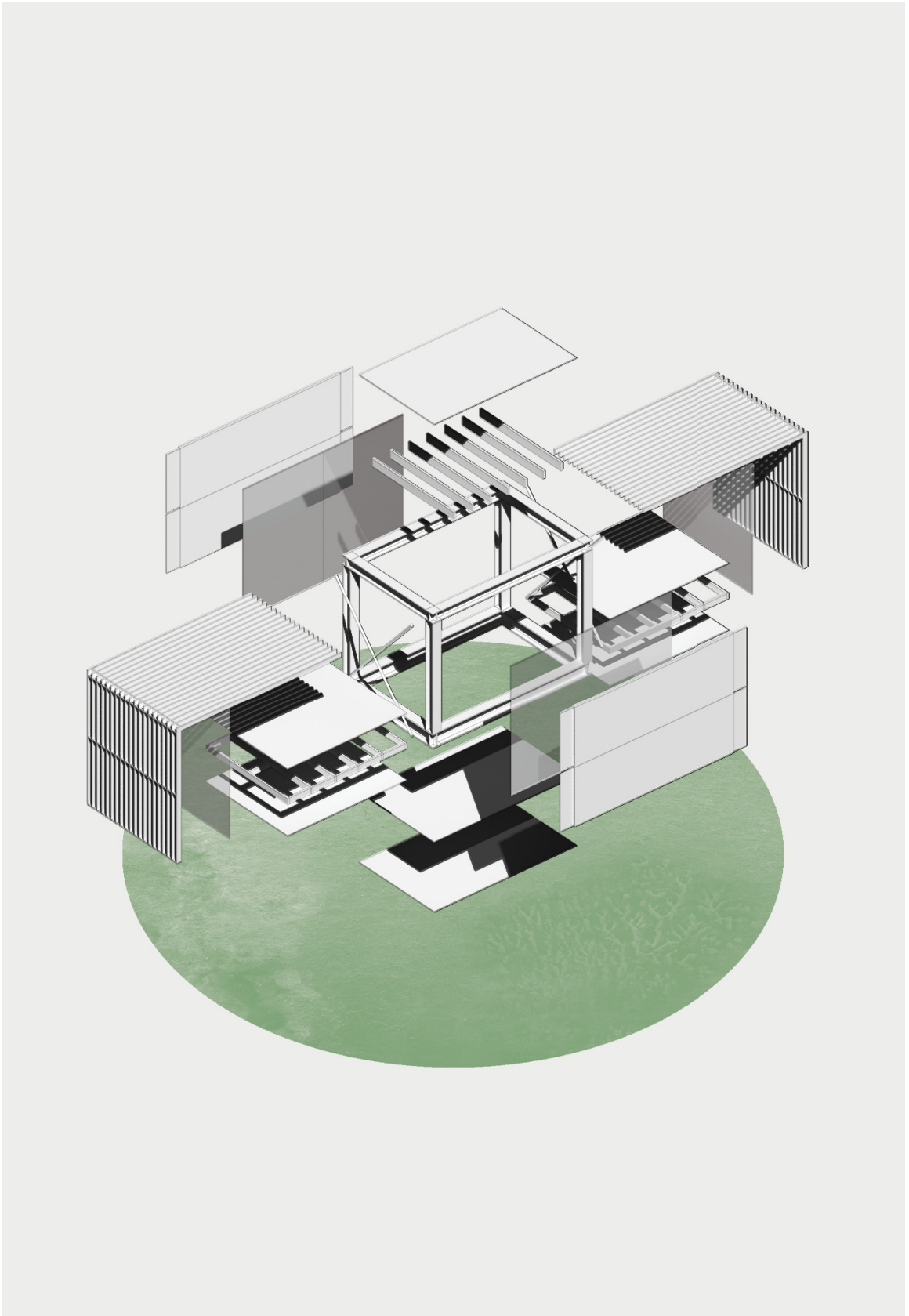
some of these lots are transformed into productive spaces, many remain vacant after purchase due to lack of education and awareness of proper urban agriculture procedures and preparation strategies. The incubator pods activate these otherwise vacant sites through utilizing a barter-based system of land preparation, beautification, and training over the duration of the pods placement in exchange for access to necessary services such as water and electricity.



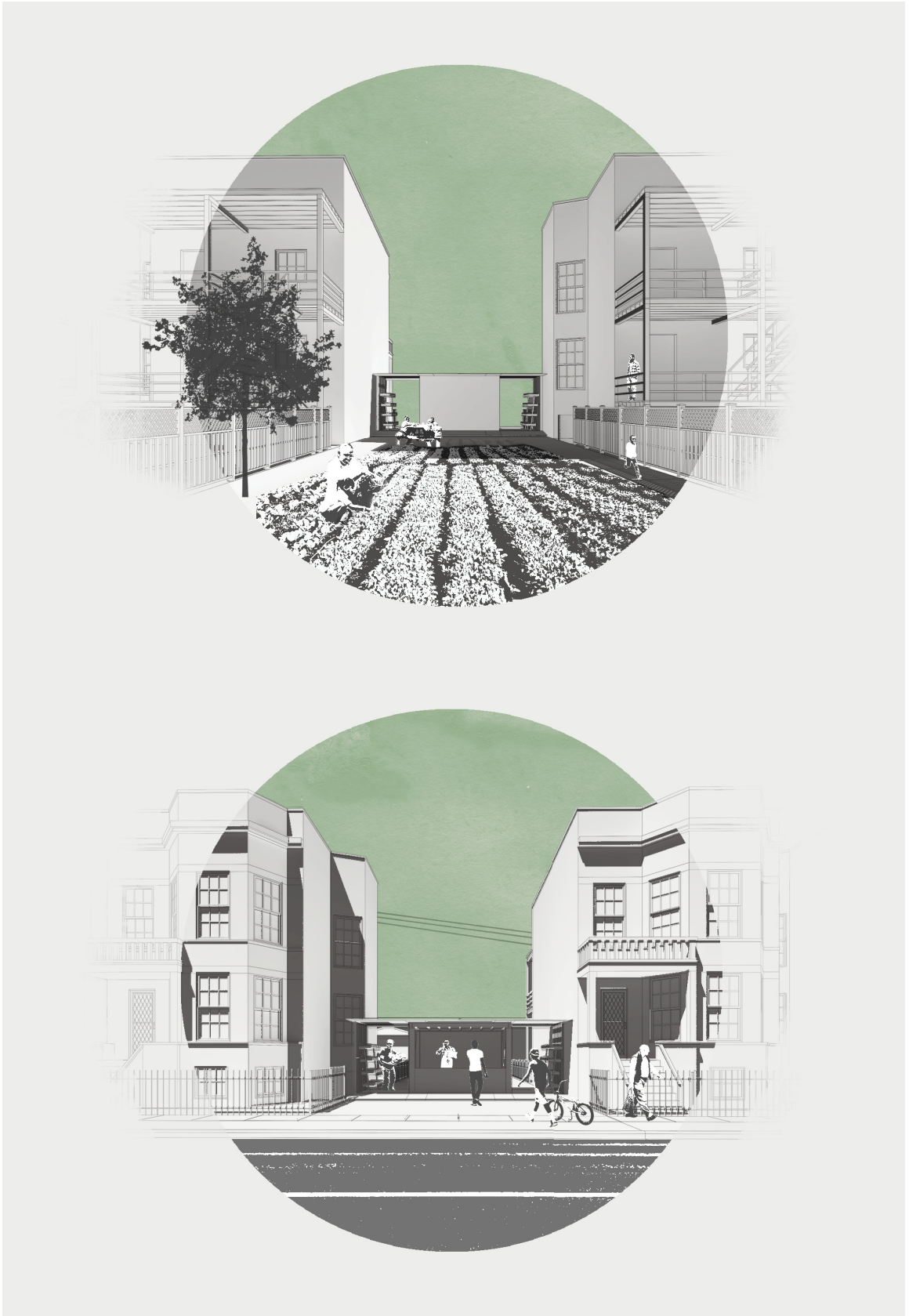
Site Location Map

## Design

The incubator pods are designed and constructed to be as efficient, mobile, and flexible as possible in order to adapt to the different ways in which these vacant lots are to be appropriated. The simple material palette and relatively straightforward construction ensure economic feasibility and self-explanatory deployment, operation and transportation procedures.



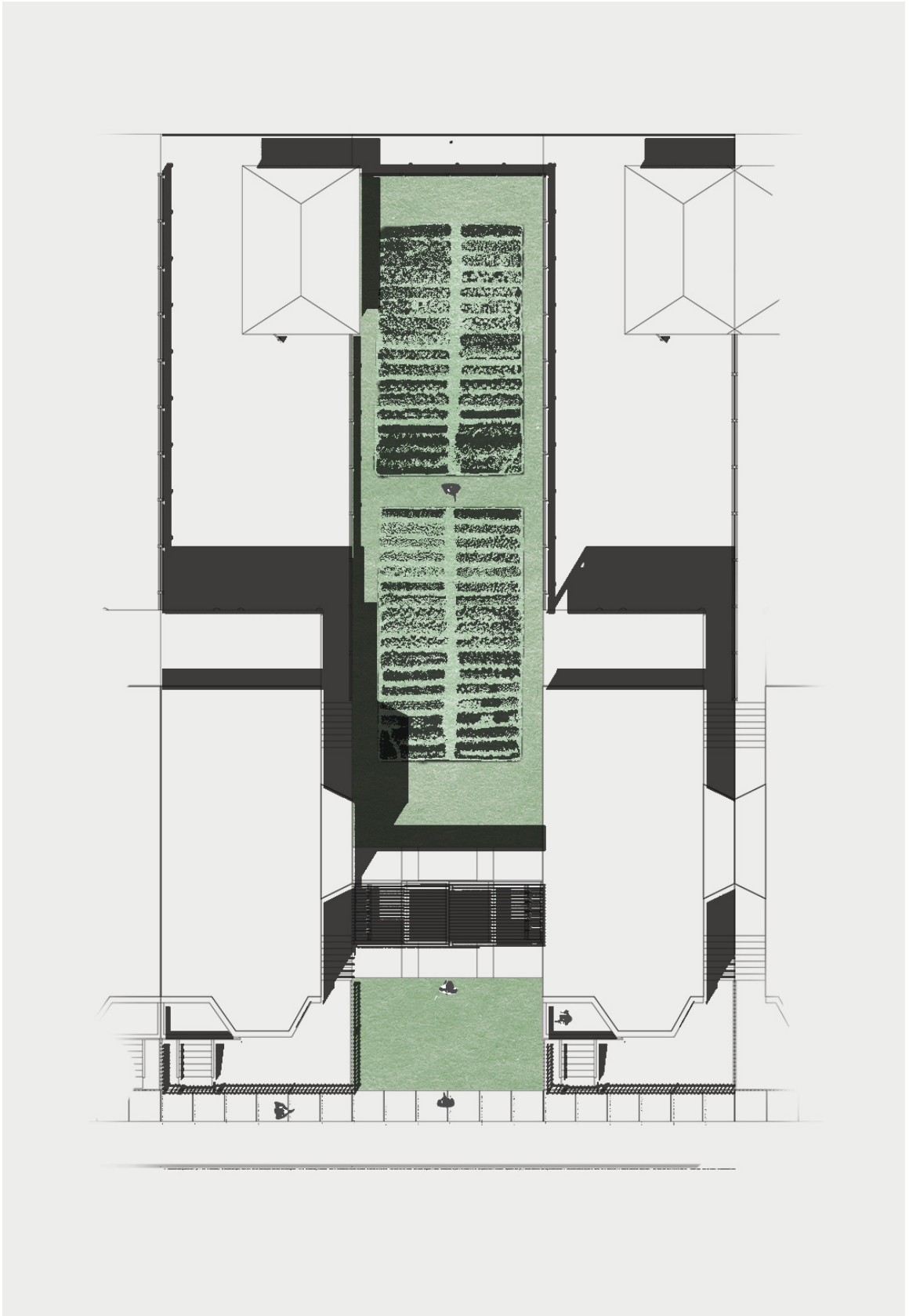
Incubator Pod | Exploded Axo



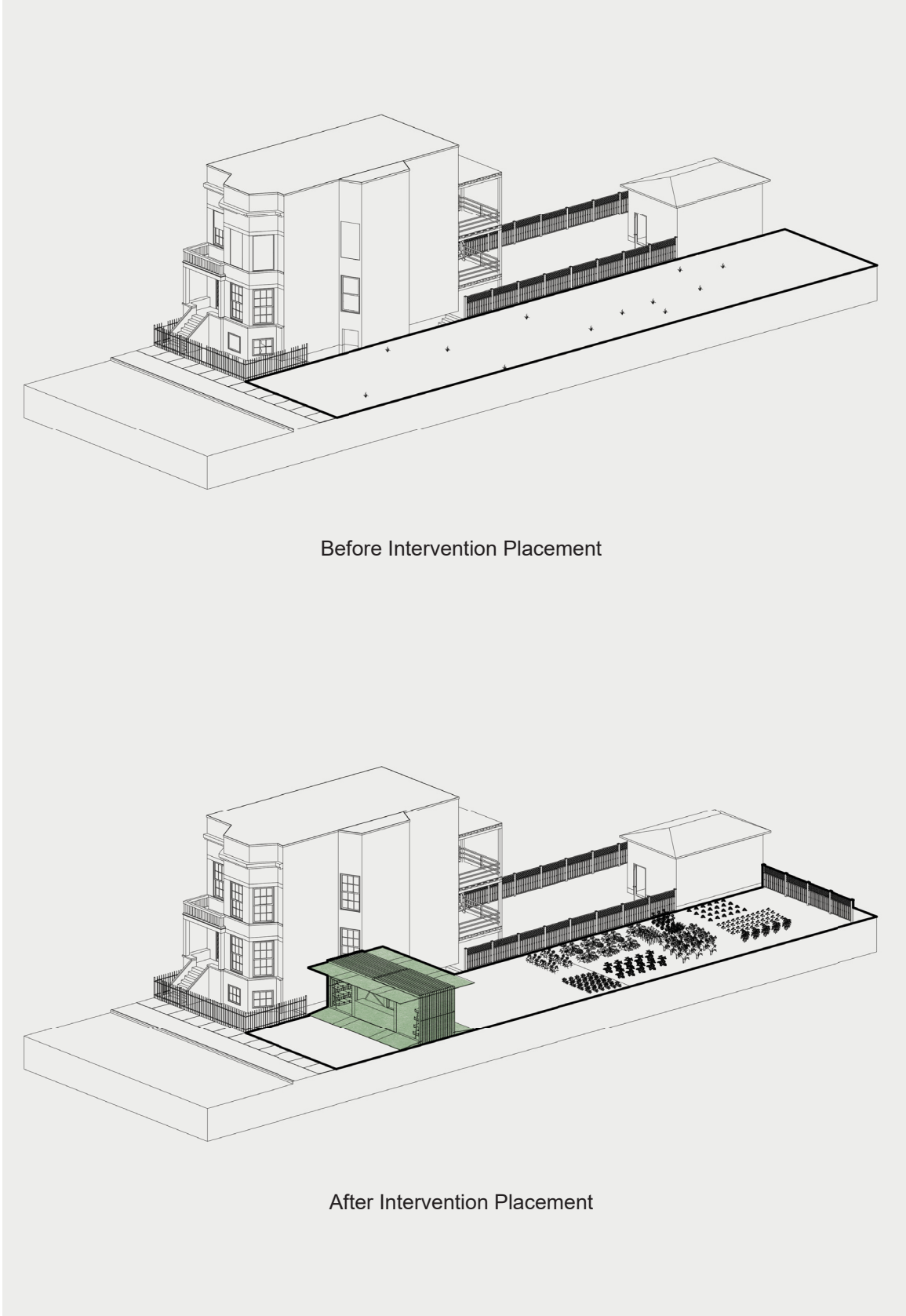
Incubator Pod | Inhabitation Images



Incubator Pod | Inhabitation Images (Nighttime)



Incubator Pod | Site Plan



Before Intervention Placement

After Intervention Placement

Incubator Pod | Before and After Site Placement Diagrams

When the pod is closed, it measures 8' x 12' and is able to be transported from the incubator to site on a standard double axle flatbed truck or trailer. When the pod is fully open, it is capable of spanning up to 30'. This transformation allows the pod to span the width of the traditional residential Chicago lot of 25' x 100', and by doing so activating once neglected and vacant spaces.

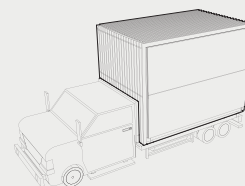
The pods are categorized into 4 typologies: production, distribution, education, and services.

The production pods are oriented towards the production and experimentation of agricultural-based products. Such products include those grown using standard means of agricultural production and hydroponics. The production pods are designed to allow for the growth of various food and floral products such as fruits, vegetables, flowers and nuts.

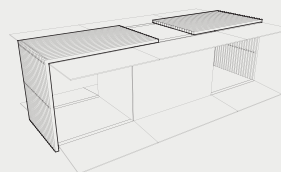
The distribution pods are oriented towards establishing localized economy through mobile-markets and points of barter and exchange. These pods provide community residents/farmers the economic platform to sell and acquire locally grown products.

The education pods provide agricultural education, training and resources such as tools and seeds necessary to support the re-appropriation of vacant land by individual residents. These pods also act as locations for pop-up workshops and training sessions.

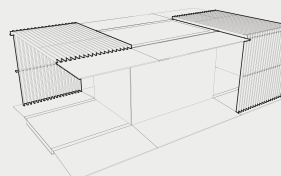
And the service pods provide the necessary services to support the agricultural activities being undertaken throughout the community. These services include mobile kitchens and mobile washrooms.



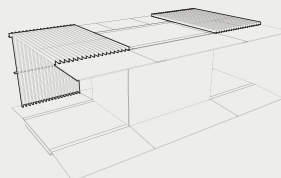
In Transportation



Configuration 1



Configuration 2

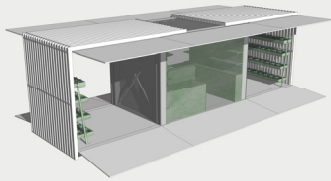


Configuration 3

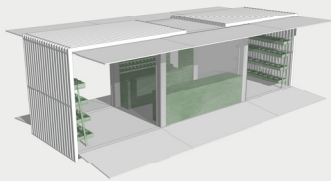
Incubator Pod Transportation and Transformation



## Production

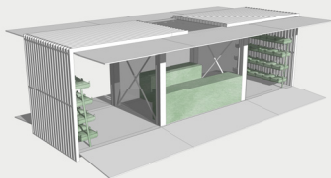


Agriculture



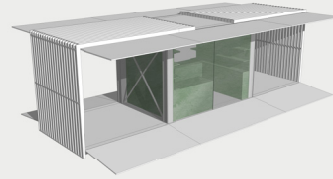
Hydroponics

## Distribution



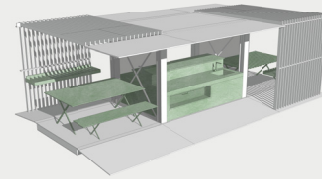
Micro Market

## Education

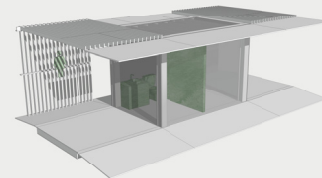


Information +  
Resources

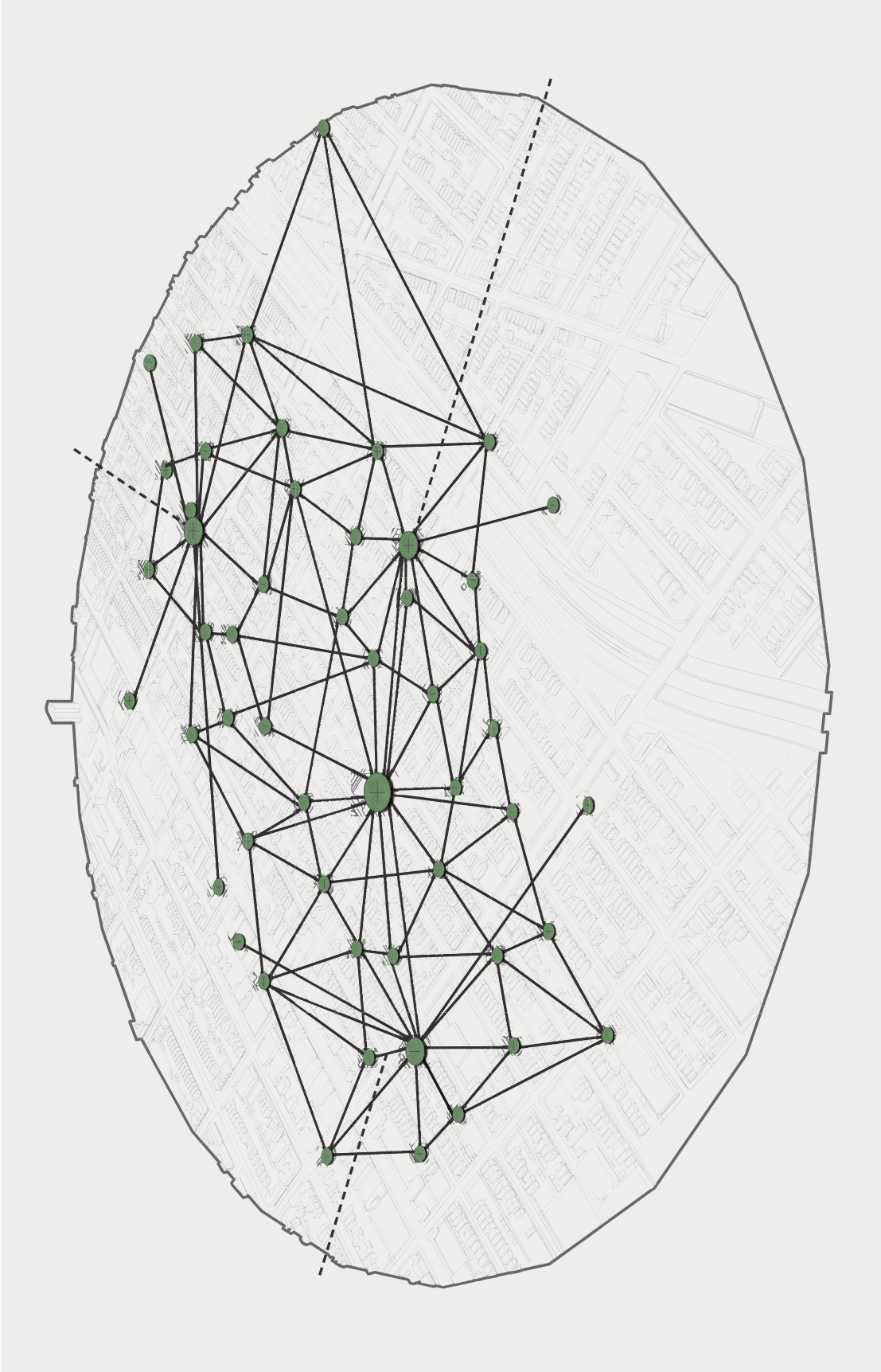
## Services



Mobile Kitchen



Bathroom



Community Network Diagram | Distributed

## Phase IV: Memorial Farms

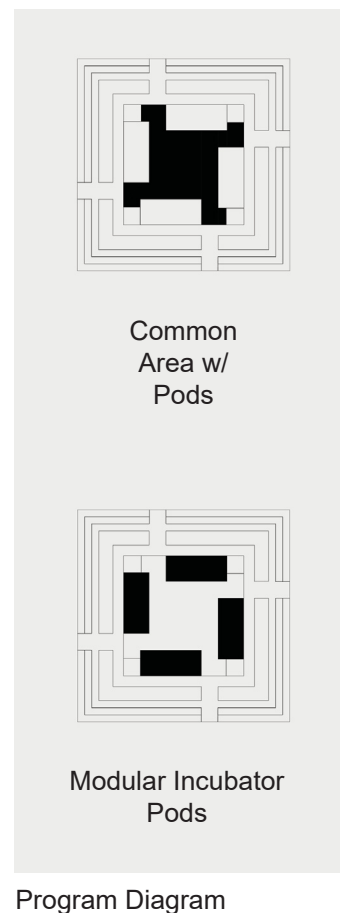
### Phase

Phase IV marks the completion of the network development process. This phase utilizes the full capacity of the Re(Claim), Re(Connect), and Re(Vitalize) framework through program that exhibits the full potential of localized economic production, community network development, urban agriculture initiatives, youth engagement, perception generation and spatial transformation. This transition is catalyzed by the introduction of the modular incubator pods into the central public space of the memorial gardens, thereby introducing the economic potential of the gardens previously unachievable in stage 1 due to barriers of widespread adoption.

### Purpose

While the newly termed memorial farms (as defined by their economic potential) still remain places of community, sanctuary, and grounded perceptions, they simultaneously provide environments of economic potential, employment and training.

Additionally, the introduction of the incubator pods into the memorial garden/farm sites transition the site activation potential from a seasonal-based intervention, into a year-round hub for various social, economic, cultural, and educational exchange.



## CHAPTER 6: CONCLUSION

Through addressing the underlying socio-spatial characteristics that define the production of violent spaces in West Garfield Park, this thesis affirms the utility of architecture as a tool to catalyze social networks and alter perceptions as means of mitigating violence in Chicago's most dangerous neighbourhoods.

The interventions proposed in this thesis highlight the transformative potential of architecture in hypersensitive urban environments. Additionally, the Re(Claim), Re(Connect) and Re(Vitalize) framework developed in this thesis, reinforces the importance of acknowledging, understanding, and accurately interpreting the key social, economic, cultural and environmental processes that transform, and are transformed by, violent spatial practices.

As such, the phased implementation strategy proposed in the framework is crucial in catalyzing the development of fundamental community networks and altering perceptions. Through these transformative architectures, the full capacity for violence mitigation is realized and allows for the reproduction and transmission of knowledge and experience necessary to replicate the creation of essential social relationships. It is thanks to the potential to replicate these processes that the established thesis framework can be applied to urban environments with similar socio-spatial urban compositions.

While the framework and design strategy proposed in this thesis are beneficial in understanding possible architectural-based solutions to violence mitigation, it should be noted that the success of the implementation strategy (like many

other transformative architectures) is effectively driven and reliant upon integration and cooperation with larger social, political and economic structures. No community is an island, and no architecture acts independent of its surrounding context.



Representational Collage | Future

## REFERENCES

- Abu-Lughod, Janet L. 2012. *Race, Space, and Riots in Chicago, New York, and Los Angeles*. NY, NY: Oxford University Press.
- Babere, N. J. 2015. "Social Production of Space: "Lived Space" of Informal Livelihood Operators; the Case of Dares Salaam City Tanzania". *Current Urban Studies*, 3: 286-299.
- Baran, Paul. 1962. *On Distributed Communication Networks*. Santa Monica, CA: Rand.
- Barnes, Germane. 2018. "Sacred Stoops: Typological Studies of Black Congregational Spaces." *Graham Foundation*. <http://www.grahamfoundation.org/grantees/5776-sacred-stoops-typological-studies-of-black-congregational-spaces>.
- Bauer, Bettina. 2010. *Violence Prevention through Urban Upgrading*. Frankfurt: KfW Entwicklungsbank.
- Bell, Carl C., and Esther J. Jenkins. 1993. "Community Violence and Children on Chicago's Southside." *Psychiatry* 56, no. 1: 46-54. doi:10.1080/00332747.1993.11024620.
- Bowen, Linda K., Victoria Gwiasda, and M. Mitchell Brown. 2004. "Engaging Community Residents to Prevent Violence." *Journal of Interpersonal Violence* 19, no. 3: 356-67. doi:10.1177/0886260503261158.
- Castillo, Sheila, Curtis Winkle, Stephen Krauss, Amalia Turkewitz, Cristina Silva, and Edie Heinemann. 2013. "Regulatory and Other Barriers to Urban and Peri-Urban Agriculture: A Case Study of Urban Planners and Urban Farmers from the Greater Chicago Metropolitan Area." *Journal of Agriculture, Food Systems, and Community Development*: 155-66. doi:10.5304/jafscd.2013.033.001.
- Certeau, Michel De., Pierre Mayol, and Luce Giard. 1998. *The Practice of Everyday Life*. Minneapolis, MN: University of Minnesota Press.
- Chicago Police Department. 2019. "Crimes - 2001 to Present." *Chicago Data Portal*, last modified March 28 <https://data.cityofchicago.org/Public-Safety/Crimes-2001-to-present/ijzp-q8t2/data>.
- City of Chicago. 2018. "Boundaries – Community Areas (current)." *Chicago Data Portal*, last modified December 18. <https://data.cityofchicago.org/Facilities-Geographic-Boundaries/Boundaries-Community-Areas-current-/cauq-8yn6>.
- City of Chicago. 2018. "Building Footprints (current)." *Chicago Data Portal*. Last Modified July 11. <https://data.cityofchicago.org/Buildings/Building-Footprints-current-/hz9b-7nh8>.
- Clark, Andrew. 2007. "Understanding Community: A Review of Networks, Ties and Contacts." Real Life Methods: ESRC National Centre for Research Methods.

- Cozens, Paul Michael. "Urban Planning and Environmental Criminology: Towards a New Perspective for Safer Cities." *Planning Practice and Research* 26, no. 4 (2011): 481-508. doi:10.1080/02697459.2011.582357.
- Draus, Paul Joseph, Juliette Roddy, and Anthony Mcduffie. "'We Don't Have No Neighbourhood': Advanced Marginality and Urban Agriculture in Detroit." *Urban Studies* 51, no. 12 (2013): 2523-538. doi:10.1177/0042098013506044.
- Earls, Felton J., Jeanne Brooks-Gunn, Stephen W. Raudenbush, and Robert J. Sampson. 1995-1997. "Project on Human Development in Chicago Neighborhoods (PHDCN)." *ICPSR Data Holdings*, 2005. doi:10.3886/icpsr13579.v1.
- Elden, Stuart. 2011. *Understanding Henri Lefebvre: Theory and the Possible*. London: Continuum.
- Farah, Leila, Mark Gorgolewski, and Mike Hardman. 2014. *Carrot City - Community & Knowledge*. <https://www.ryerson.ca/carrotcity/community.html>.
- Friedland, Roger. 1992. "Contemporary Sociology." *Space, Place, and Modernity: The Geographical Moment* 21, no. 1: 11-15.
- Gartz, Linda. 2018. *Redlined: A Memoir of Race, Change, and Fractured Community in 1960s Chicago*. Berkeley, CA: She Writes Press.
- Goonewardena, Kanishka, Stefan Kipfer, and Richard Milgrom. 2008. *Space, Difference, Everyday Life: Reading Henri Lefebvre*. New York, NY: Routledge.
- Haines, Lindsay. 2010. *White Flight and Urban Decay in Suburban Chicago*. Master's thesis, Illinois Wesleyan University. [https://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1112&context=econ\\_honproj](https://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1112&context=econ_honproj).
- Hayden, Dolores. 1997. *The Power of Place: Urban Landscapes as Public History*. Cambridge, MA: MIT.
- Heinzmann, David. 2017. "Leaderless Chicago Street Gangs Vex Police Efforts to Quell Violence." *Chicago Tribune*, last modified July 29. <https://www.chicagotribune.com/news/local/breaking/ct-chicago-violence-gangs-20160728-story.html>.
- Hirsch, Arnold R. 1998. *Making the Second Ghetto Race and Housing in Chicago, 1940 - 1960*. Chicago: Univ. of Chicago Press.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York, NY: Random House.
- Johnstone, John W.C. 1981. "Youth Gangs and Black Suburbs." *The Pacific Sociological Review* 24, no. 3: 355-75. doi:10.2307/1388811.



- Kapp, Silke, and Ana Paula Baltazar. 2015. *Out of Conceived Space: For Another History of Architecture*. Master's thesis, UC Berkeley. [http://www.mom.arq.ufmg.br/mom/biblioteca\\_novo\\_2/arquivos/Kapp\\_baltazar\\_new\\_history.pdf](http://www.mom.arq.ufmg.br/mom/biblioteca_novo_2/arquivos/Kapp_baltazar_new_history.pdf).
- Katyal, Neal Kumar. 2001. "Architecture as Crime Control." *SSRN Electronic Journal*, doi:10.2139/ssrn.290756.
- Katz, Nancy, David Lazer, Holly Arrow, and Noshir Contractor. 2004. "The Network Perspective on Small Groups: Theory and Research." *Theories of Small Groups: Interdisciplinary Perspectives* 35, no. 3: 277-312. doi:10.4135/9781483328935.n8.
- Kaufman, Jerome L., and Martin Bailkey. 2000. *Farming Inside Cities: Entrepreneurial Urban Agriculture in the United States*. Cambridge, MA: Lincoln Institute of Land Policy.
- Kerr, Derek. 1994. "The Time of Trial by Space? Critical Reflections on Henri Lefebvre's Epoch of Space." *Common Sense: Journal of Edinburgh Conference of Socialist Economics*, 15: 18-35.
- Klinenberg, Eric. 2018. *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life*. New York: Crown.
- Knox, Paul, and Steven Pinch. 2013. *Urban Social Geography: An Introduction*. 6th ed. New York: Routledge.
- Kubrin, Charis E. 2010. "Shaw, Clifford R., and Henry D. McKay: Social Disorganization Theory." *Encyclopedia of Criminological Theory*. doi:10.4135/9781412959193.n228.
- "Large Lots." 2018. *Large Lots*. <https://largelots.org/>.
- Lefebvre, Henri, and Donald Nicholson-Smith. 2016. *The Production of Space*. Malden: Blackwell Publishing.
- Lovell, Sarah Taylor. 2010. "Multifunctional Urban Agriculture for Sustainable Land Use Planning in the United States." *Sustainability* 2, no. 8: 2499-522. doi:10.3390/su2082499.
- Lucchi, Elena. 2014. *Humanitarian interventions in situations of urban violence*. ALNAP Lessons Paper. London: ALNAP/ODI.
- Lugalia-Hollon, Ryan. 2018. *The War on Neighborhoods: Policing, Prison, and Punishment in a Divided City*. S.I.: Beacon.
- Mares, Dennis. 2009. "Social Disorganization and Gang Homicides in Chicago." *Youth Violence and Juvenile Justice* 8, no. 1: 38-57. doi:10.1177/1541204009339006.
- Marrifield, Andrew. 1993. "Place and Space: A Lefebvrian Reconciliation." *Transactions of the Institute of British Geographers*. 18, no. 4: 516-31.

- Mears, Daniel P., and Avinash S. Bhati. 2006. "No Community Is an Island: The Effects of Resource Deprivation on Urban Violence in Spatially and Socially Proximate Communities." *Criminology* 44, no. 3: 509-48.
- Mogk, John E., Sarah Wiatkowski, and Mary J. Weindorf. 2010. "Promoting Urban Agriculture as an Alternative Land Use for Vacant Properties in the City of Detroit: Benefits, Problems and Proposals for a Regulatory Framework for Successful Land Use Integration." *The Wayne Law Review* 56, no. 1521: 1521-580.
- Mommersteeg, Brett. 2014. "Space, Territory, Occupy: Towards a Non-Phenomenological Dwelling." *Electronic Thesis and Dissertation Repository*. 2510. <https://ir.lib.uwo.ca/etd/2510>.
- Newman, Oscar. 1974. *Architectural Design for Crime Prevention*. Washington/D.C.: U.S. Gov. Print. Off. in Komm.
- Olsen, Marvin E. 1965. "Durkheim's Two Concepts of Anomie." *The Sociological Quarterly* 6, no. 1: 37-44. <http://www.jstor.org/stable/4105296>.
- O'Neal, Lonnae. 2016. "Losing the Sacred Space of the Front Porch." *The Undeclared*. <https://theundefeated.com/features/losing-the-sacred-space-of-the-front-porch/>.
- "On the Front Porch, Black Life in Full View." 2018. *The Independent*, last modified December 8. <https://www.independent.co.uk/life-style/design/on-the-front-porch-black-life-in-full-view-a8672596.html>.
- Petrescu, Doina, and Kim Trogal. 2017. *The Social (Re)Production of Architecture: Politics, Values and Actions in Contemporary Practice*. London and New York: Routledge.
- Petro, Michael J. 2017. "Map of Chicago Homicides 2006 - 2016." *Michael J. Petro: Chicago Criminal Defense Attorney*, last modified July 5. <https://www.mjpetro.com/news/chicago-homicides-map/>.
- Piatkowska, Ksenia Katarzyna. 2012. "Humanities and Social Science Review." *Economy and Architecture: The Role of Architecture in Process of Building the Economic Potential of Space* 1, no. 2: 549-55.
- Piscitelli, Anthony, and Sean Doherty. 2018. "Connecting Social Disorganization to Broken Windows and Routine Activities." *The Canadian Geographer / Le Géographe Canadien*. doi:10.1111/cag.12468.
- Poulsen, Melissa N., and Marie L. Spiker. 2014. "Integrating Urban Farms into the Social Landscape of Cities." PhD diss., Johns Hopkins Bloomberg School of Public Health. [https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/\\_pdf/projects/urban-soil-safety/Community%20buy-in%20for%20urban%20farms\\_July2014\\_Full%20report.pdf](https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/_pdf/projects/urban-soil-safety/Community%20buy-in%20for%20urban%20farms_July2014_Full%20report.pdf).

- Querrien, Anne, Constantin Petcou, and Doina Petrescu. 2013. "Making a Rhizome, or Architecture after Deleuze and Guattari: A Conversation on the Practice of Atelier D'architecture Autogérée." In *Deleuze and Architecture*, edited by Frichot Hélène and Loo Stephen, 262-75. Edinburgh: Edinburgh University Press.
- Rhee, Nissa, Sebastián Hidalgo, and Ramzi Dreessen. 2018. "On Chicago's West Side, People Die 16 Years Earlier than Downtown." *Chicago Magazine*. <https://www.chicagomag.com/city-life/February-2018/A-Second-City-West-Side-Health-Life-Expectancy/>.
- Rothstein, Richard. 2018. *The Color of Law: A Forgotten History of How Our Government Segregated America*. New York: Liveright Publishing Corporation, a Division of W.W. Norton & Company.
- Sampson, Robert J. 2013. *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago: University of Chicago Press.
- Unwin, Tim. 2000. "Transactions of the Institute of British Geographers." *A Waste of Space? Towards a Critique of the Social Production of Space* 25, no. 1: 11-29.
- "Vacant and Abandoned Buildings - Violations | City of Chicago | Data Portal." *Chicago Data Portal*. 2019. <https://data.cityofchicago.org/Buildings/Vacant-and-Abandoned-Buildings-Violations/kc9i-wq85>.
- Wheeler, Dan. 2007. *The Historic Chicago Greystone: A Users Guide for Renovating and Maintaining Your Home*. Chicago: City Design Center, College of Architecture and the Arts, University of Illinois at Chicago.
- Wickes, Rebecca. 2016. "Social Disorganization Theory: Its History and Relevance to Crime Prevention." *Preventing Crime and Violence*: 57-66. doi:10.1007/978-3-319-44124-5\_6.
- Wickes, Rebecca, Homel, R. and Zahnow, R. 2016. "Safety in the Suburbs: Social Disadvantage, Community Mobilization, and the Prevention of Violence." In *J. Stubbs & S. Tomsen (Eds), Australian Violence*. Sydney: Federation Press.
- Zhang, Zhongyuan. 2006. "Ephemera." *What Is Lived Space?* 6, no. 2: 219-23.