

FORM FRAMING PLACE

Implementing Diverse Urban Forms in Core City

Madison Nelson

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in Core City*

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RESEARCH QUESTIONS

What is Detroit going to do with its neighborhoods filled with blight?

Can new housing forms, such as "Missing Middle", be implemented in Detroit neighborhoods for future use?

What lessons learnt from the analysis of the urban form of selected cities improve the lives of residents and the existing neighborhoods of Detroit?

How can the analysis of urban design of selected cities create new concepts which can be applied to an urban master plan in Detroit?

ABSTRACT

The Core City neighborhood, like many other neighborhoods in Detroit, is characterized by a vast number of single-family houses. However, many of these houses were destroyed during the 1967 Detroit riots, which left numerous vacant lots throughout the neighborhood. In contrast, cities such as Boston, Massachusetts; Warsaw, Poland; Copenhagen, Denmark; and Florence, Italy have dense urban forms with diverse housing types. In these cities, a wide range of housing options are available, including multi-family housing, townhouses, and apartments.

To address the lack of housing diversity in the Detroit Core City neighborhood, a proposal has been created to implement a *Form Framing Place* strategy. This strategy involves implementing new urban forms that bring in new diversity and density through people and buildings. This strategy aims to create a more diverse and sustainable neighborhood that offers a range of housing options for people of different ages, incomes, and lifestyles. This will be achieved through the development of mixed-use buildings, townhouses, and apartments that can accommodate a range of household sizes and needs. The strategy also involves the creation of public spaces, such as parks and plazas, that provide opportunities for social interaction and community engagement.

Overall, the *Form Framing Place* strategy in the Detroit Core City neighborhood aims to revitalize the area and create a more diverse and sustainable urban environment. This strategy will break the monolithic zoning code of single family housing by incorporating a range of housing options and public spaces. By doing so, the neighborhood will become more self-sustaining and resilient to future changes.

THESIS STATEMENT

Can a diverse range of housing forms, such as “Missing Middle” housing, attract residents to Detroit? This thesis will investigate precedents of various urban typologies to formulate a proposal of intervention for Core City, a depopulated neighborhood in Detroit. Cities including Boston, Copenhagen, Florence, and Warsaw were used as case studies to explore urban design principles. Population density and building typologies work towards the formulation of new housing typology design for future interventions in Detroit.

Framing concepts for this thesis includes density, urban form, typology, and urban context of Detroit. Nicola Dempsey, in her article “Components of Urban Form”, defines urban density as “the concentration of people, employment, housing units, building floor area, or some other measure of human occupancy, activity, and development across a certain unit of land.” It essentially refers to the degree of population or development concentration or compactness in a city. On the other hand, urban form refers to the physical characteristics of built-up areas, such as the size, shape, density, and arrangement of places. This is a consistent term referenced by urban planners Geoff Boeing and Kevin Lynch. Urban form relates to the type of program it consists of, such as building typology. Typology is the process of recognizing and classifying structures and urban settings based on how similar their primary characteristics are. Examples of housing typologies include single family houses, duplex, multiplex, townhouse, row house, and apartments. The typical housing types in Detroit include single family houses and apartment buildings, and are lacking Missing Middle Housing. The term “Missing Middle” was coined by architect and urban planner, David Parolek, who states that “Missing Middle Housing is a range of house-scale buildings with multiple units—compatible in scale and form with detached single-family homes—located in a walkable neighborhood.” This concept can start to be applied to an urban context, specifically Detroit. A project that has implemented the concept of “Missing Middle” housing in Detroit is called City Modern in Brush Park.

The interest of this study is to rework the urban environment of Core City, a Detroit neighborhood, to include an exploration of housing from other cities’ urban design principles. Detroit has gone through an extensive decline over the past 50 years. According to an article called “Detroit, an Abandoned City”, there are “70,000 buildings, 31,000 homes, and 90,000 vacant lots abandoned in Detroit.” The current status of many Detroit neighborhood homes are abandoned and vacant, but can be revitalized for future use. These buildings hold the architectural character and history of the city and are an opportunity for reuse and revitalization within Detroit. Analyzing the urban fabric of cities’ in the United States and Europe allows for comparisons of urban density, through understanding the built environment. Boston, Copenhagen, Florence, and Warsaw, are all cities that display a compact way of living sustained through the design of the urban form. The street-scapes are dense and tightly designed to include all forms of travel, such as foot traffic, cycling, and vehicular traffic. The building typology also allows for compact living of these cities to flourish by providing many of the residents daily resources in a close proximity. The levels of sustainability and accessibility that can be observed in the dense urban fabric of the selected cities, will help teach designers how to solve issues in blighted neighborhoods. Detroit consists of a vast number of single family houses and is lacking middle housing types throughout the city. The proposal is aimed to create an urban master plan in the Core City neighborhood in Detroit. This proposal will provide a framework for city planners and designers to aim to bring back residents into the city through implementing new housing forms, such as duplexes, multiplexes, and row houses. Studying the urban fabric of other cities’ will allow for implementation of these principles to the context of Detroit.

Different sites within the cities can be investigated through the urban form of figure ground mapping studies by learning and comprehending built forms as a preliminary way to understanding the urban environment of the chosen cities. These figure grounds made it possible to comprehend the differences in spatial features between built and unbuilt forms.

This led to developing the figure ground maps further to understand the building typologies in the area, specifically the typical housing type known to that specific city. Through mapping, the spatial characteristics and scale are visible, as well as the implications in the chosen cities by retrieving photos of the various dwelling typologies. Additionally, a project called City Modern in Brush Park, is a desirable initiative in Detroit. This project is a tool and reference for this research because it incorporates a wide variety of housing typologies to suit a variety of people.

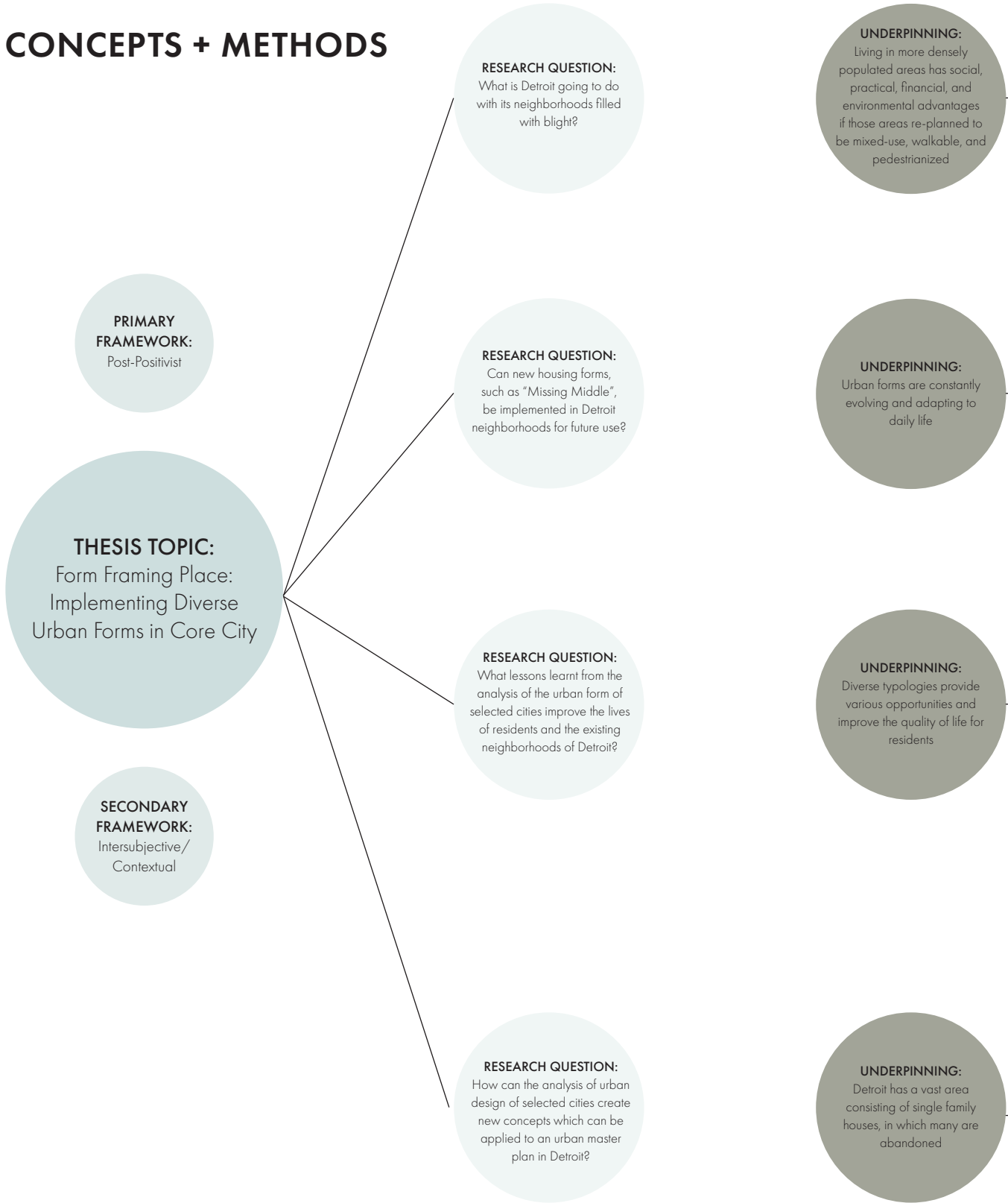
Detroit has had a loss of residents and went through depopulation throughout the city. This has caused abandonment and neighborhoods filled with blight. These neighborhoods typically consist of single family houses, amplifying the lack of diverse housing typologies throughout the city. This is also connected to density and the underlying factor of the city of Detroit as a whole being less dense throughout the neighborhoods, lacking in different opportunities for numerous types of housing. Using other cities as precedents can allow for bringing forth concepts and frameworks to bring to Detroit. The selected cities that were analyzed were chosen because of their diverse range of housing typologies, which differ from Detroit. The studies of the selected cities are subjective and could have been chosen through a given framework that is more appropriate and has a similar history to the city of Detroit.

There are more solutions to the revival of Detroit than just implementing a diverse range of housing typologies. It's important to implement public space and "unbuilt" forms, in addition to the various housing types. Allowing for additional time to further the analysis of these public spaces will allow for an improved proposed intervention. Since a classmate's topic, Odette Georgees, focuses specifically on these third places, merging our topics together will allow for us to cross ideas and work together to create a more developed project.

Researching and analyzing cities as precedents is an essential aspect of urban design and planning. By looking at

successful examples of diverse housing types, designers and urban planners can gain insights into effective strategies and tactics for creating more inclusive and equitable urban environments. This process is particularly important for cities that lack diverse housing options, such as Detroit, which has long struggled with issues of blight, disinvestment, and a lack of affordable housing.

CONCEPTS + METHODS



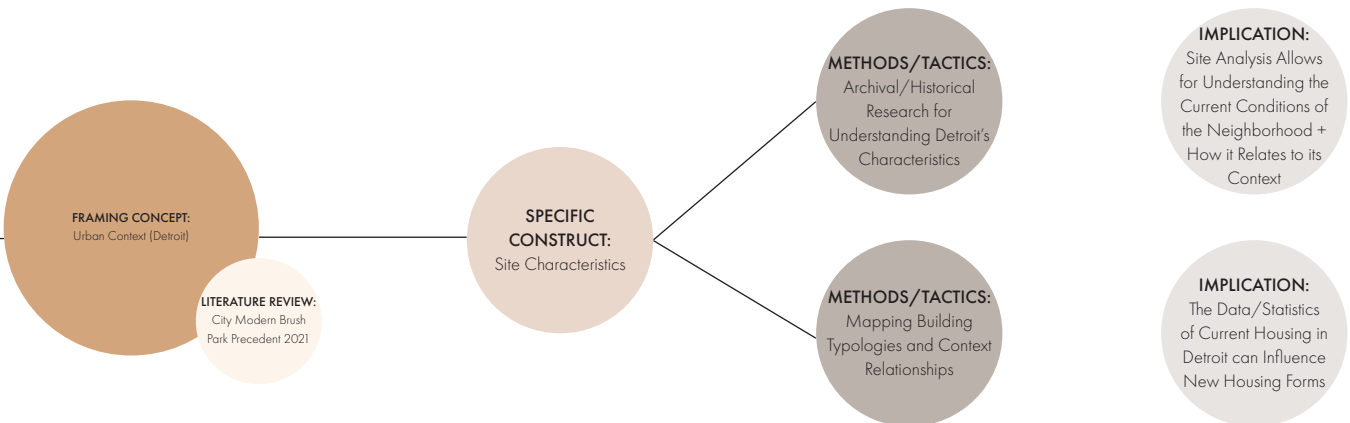
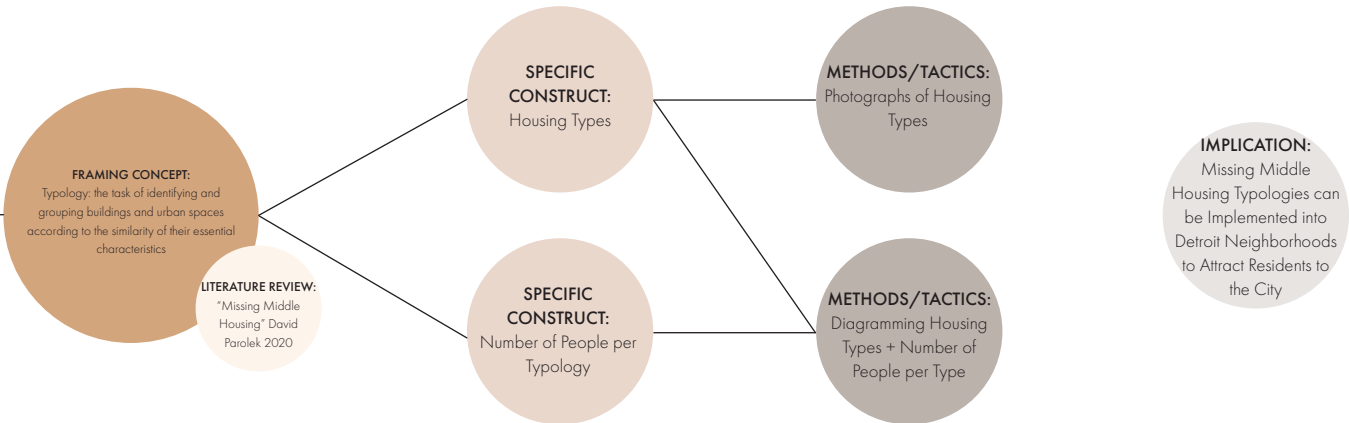
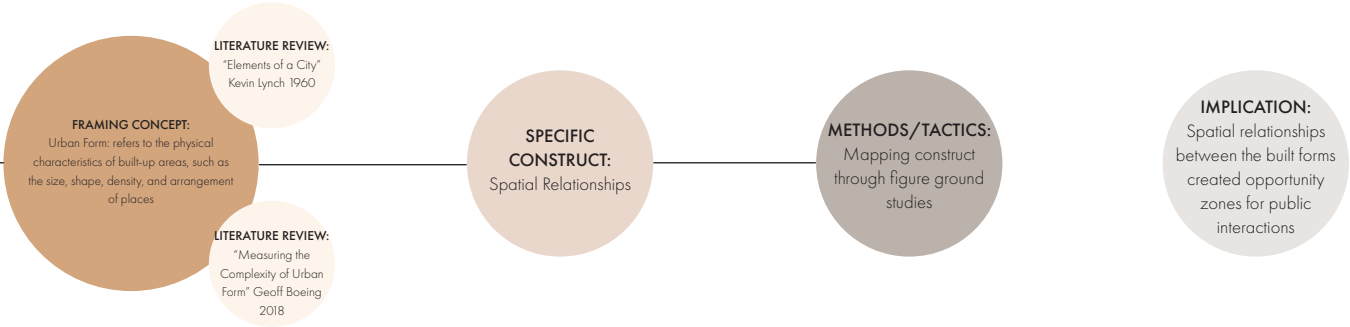
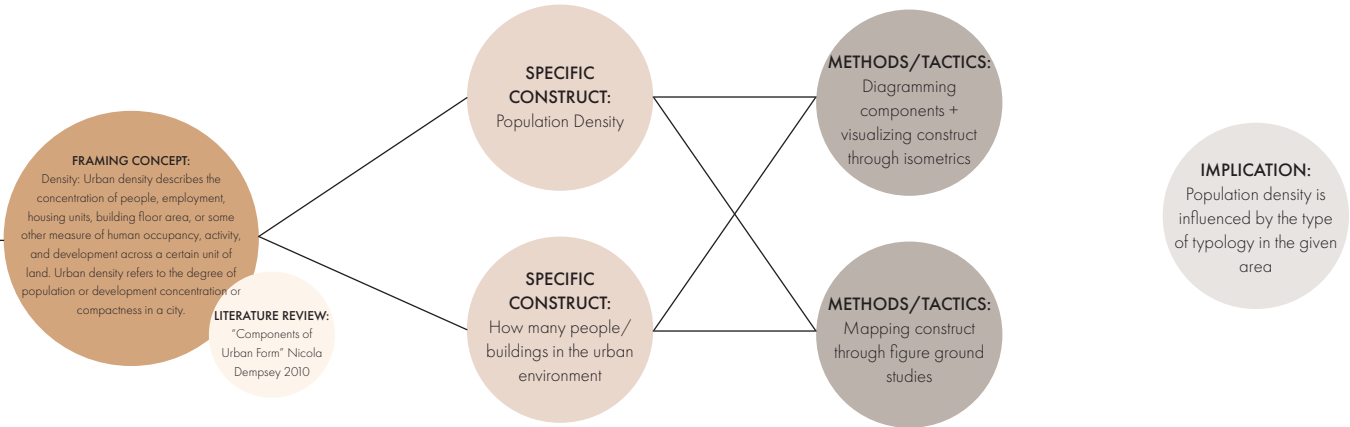


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1.1 URBAN FORM

WHAT IS URBAN FORM?

Urban areas are a unique example of how we can alter the terrain to improve our survival, enjoyment, and comfort. It isn't just that we embark on this transformation that matters; it's how we carry it out. The collective term for the physical configurations, arrangements, and buildings found in urban areas is *Urban Form*.

"Urban form refers to the physical characteristics of built-up areas, such as the size, shape, density, and arrangement of places. It is constantly evolving and adapting to daily life. These changes include buildings, sidewalks, parks, and roads" (Springer). Urban design is about creating connections between humans and places; movement and form.

ELEMENTS OF A CITY

Urban planning is a component of urban design as it gives the built environment form, shape, and identity. Urban planning connects these forms to one another creating networks. These networks, which investigate the relationships between the built environment, are the building blocks of urban formations. People use these forms to navigate around the city. In “The Image of a City”, Kevin Lynch argues that people orientate themselves through mental maps. Lynch primarily used recurring patterns in the maps to draw conclusions about the fundamental aspects of city form that influence perception. These maps consist of urban forms for us to distinguish in the urban environment.

These physical forms can be categorized into five elements: paths, edges, districts, nodes, and landmarks. Urban form relates to the in-between spaces and understanding the connection between the classified elements. The built urban form influences these elements, which Lynch defines each of these through spatial aspects and built forms. All of these components are interconnected. Districts are divided into nodes and edges, which are connected by paths and landmarks. These elements form the basis of a city’s environmental perception. Taking these five concepts, from Lynch, allows for a start for analyzing Detroit’s current conditions as a city.

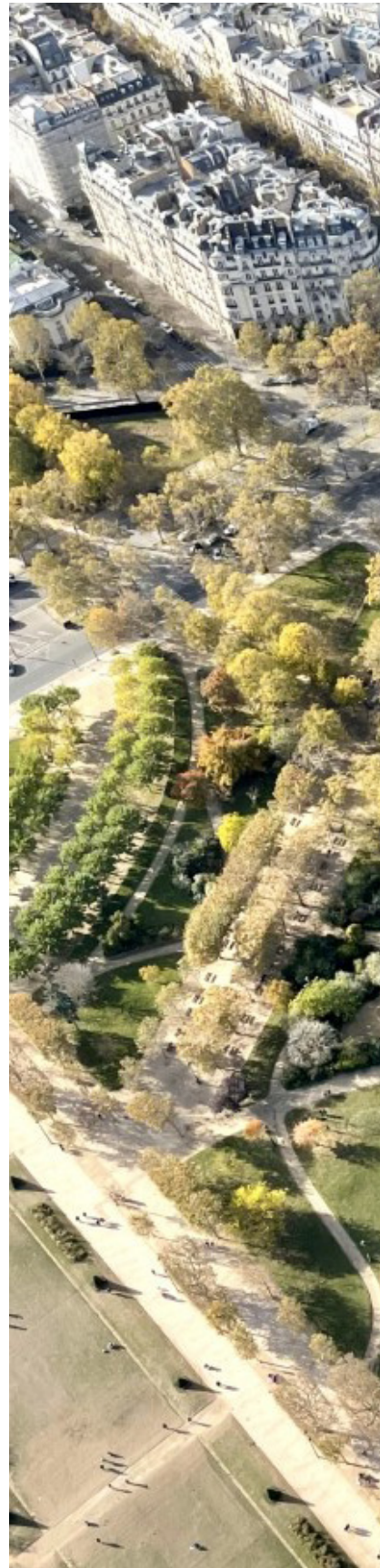


Figure 1.1.1 - Paris, France Urban Form



ELEMENTS OF A CITY | PATH

“A channel that the observer moves along. They could be highways, stairways, rail lines, waterways, or transportation lines. These make up a large portion of many people’s identities” (Lynch).

The Dequindre Cut Greenway is located in Detroit, Michigan and is a pedestrian link between the East Riverfront, Eastern Market, and a number of other residential communities. It is an urban recreational walk. The Dequindre Cut, formerly a Grand Trunk Railroad line, is a greenway that is primarily below street level. The greenway, which is well-known for its examples of graffiti and urban art, has a 20-foot-wide paved route with separate lanes for bicycle and pedestrian traffic.



Figure 1.1.2 - Dequindre Cut



Figure 1.1.3 - Dequindre Cut

ELEMENTS OF A CITY | EDGE

"Linear components the observer does not use as paths. They are the boundaries between two stages, linear interruptions in continuity, and sometimes seams or lines connecting two regions" (Lynch).

The riverside is a section of the Detroit waterfront transformation project and stretches for three and a half miles from Joe Louis Arena to Gabriel Richard Park. Three million people visit the riverside, which connects to the Dequindre Cut, each year to walk, run, bike that the rejuvenated riverfront offers. The River Walk connects the parks, plazas, pavilions, pathways, and open green space that make up the river front's attractions.



Figure 1.1.4 - Detroit Riverwalk



Figure 1.1.5 - Detroit River

ELEMENTS OF A CITY | DISTRICT

"Medium-to-large areas of the city that are perceived to be two-dimensional, which the observer mentally enters "within of," and are distinguishable as having defining characteristics" (Lynch).

In Detroit, Michigan, there is a district known as Eastern Market. The Eastern Market farmer's distribution center, which features more than 150 food and specialty enterprises, is the largest open-air flowerbed market in the country and is part of the largest historic public market in the United States. The city's famed Eastern Market sees roughly 45,000 people on Saturdays. This market is located 1 mile north of Detroit's downtown (Eastern Market).



Figure 1.1.6 - Eastern Market



Figure 1.1.7 - Eastern Market

ELEMENTS OF A CITY | NODE

"Points that are the strategic locations in a city that an observer may access from which they travel; they are areas where transit stops, points of intersection or confluence, or times of change" (Lynch).

Campus Martius Park, which is located in the heart of the city, is the designated gathering place for Detroiters. The park, which included several acres, served as a hub for community gatherings. A new walkable district is created by its linking streets. Since first opened, the park has helped downtown Detroit become a thriving district. With gardens, food trucks, and an ice rink in the winter, the park is a year-round outdoor attraction.



Figure 1.1.8 - Campus Martius



Figure 1.1.9 - Campus Martius

ELEMENTS OF A CITY | LANDMARK

"A point of reference, although in this instance the observer does not go inside; it is external. They typically consist of a clearly defined physical item such as a mountain, building, sign, or store" (Lynch).

The Monument to Joe Louis, commonly called The Fist, is a monument in honor of boxer Joe Louis. It serves as a symbol of his punch's force both inside and outside the ring. Louis fought against Jim Crow laws, therefore the fist was meant to be a protest against racism in a figurative sense. Near Detroit's riverside, facing Canada, lies Hart Plaza, where you may find this landmark. This is a landmark people use to orientate themselves going into the downtown district.



Figure 1.1.10 - The Fist



Figure 1.1.11 - The Fist

ELEMENTS OF DETROIT NEIGHBORHOODS

These examples of path, edge, district, node, and landmark that are well known throughout Detroit are located in the downtown districts. In Detroit, people are more associated with this concept of connection with people, which typically occurs in downtown Detroit. What about the suburbs, neighborhoods, residential areas? The current state of many Detroit neighborhoods are filled with blight: abandoned buildings causing harm to its surroundings, with some of the existing housing structures losing their defined form. Single family housing is the typical housing type in Detroit. How do the elements of a city appear with the similar forms of single family housing throughout the neighborhoods?

The average Detroit neighborhoods include paths that are the typical sidewalks and streets, with vehicle transportation being most common. Edge conditions are defined through the alignment of houses down the streets, with similar setbacks. The neighborhoods create their own districts within the city of Detroit. These districts are similar in urban form, creating it difficult to differentiate from each other. There are a limited number of parks and community areas in neighborhoods. These nodes are very unlikely to occur in the typical Detroit neighborhood. Landmarks are absent throughout the suburbs. These elements are not defined and are lacking in Detroit neighborhoods. This is due to the density declining throughout the city. Residents left the city of Detroit, leaving these existing houses and whole neighborhoods to be abandoned. Can implementing new building typology forms to the city attract residents to move back to Detroit neighborhoods? "Neighborhoods are reduced to suburban's lacking diversity or undifferentiated urbanism whose neighborhood relevance amounts to being a name on the map" (Talen). Very few neighborhoods still have a sense of place, local rootedness, social connection, and a sense of agency. Detroit falls into this lack of diverse typologies, but is known on the map for being "neglected". With the lack of diverse building typologies and urban planning, people stay away from this alienated city. Although Detroit feels familiar, as Detroit is the place where we live - cars, malls, freeways were invented, it also feels alien because nobody in Detroit seems bothered

by the fact that there's an issue with wealth and culture, which seems to have been abandoned.

Urban planning is the key to understanding these neighborhoods through conducting an analysis on Detroit neighborhoods that will allow us to understand the current conditions of neighborhoods and how urban form can influence a new perception of the city of Detroit. The elements of a city are just the beginning steps to analyze the urban conditions and in order to develop a new framework of building forms to frame these elements.

Additionally, it's important to consider the social and cultural implications of urban planning in Detroit neighborhoods. The lack of diverse building typologies has led to a lack of social and cultural diversity, which can be addressed through intentional planning and design. By incorporating more diverse building forms and public spaces,

In conclusion, understanding the elements of a city and the current urban conditions in Detroit neighborhoods is essential to developing effective urban planning strategies. By incorporating diverse building typologies and addressing the social and cultural implications of urban planning, Detroit can begin to re-imagine its neighborhoods as vibrant and inclusive communities.

URBAN FORM ANALYSIS

These elements are what makes up urban form within cities. "Cities are complex systems composed of many human agents interacting in physical urban space" (Boeing). Factors like population, density, employment, wealth, and traffic volume can all be recognized and analyzed at different scales to illustrate how the system is changing. Urban form is made up of pictures of cities, cultural and artistic experiences, feelings, memories of places, concepts, and theoretical frameworks. Both humans and their cities and neighborhoods shape one another. In terms of network character, fractal structure, diversity, and entropy, the resulting physical patterns can be used to study the urban form (Boeing). In Geoff Boeing's "Measuring the Complexity of Urban Form and Design", Boeing states "For neighborhood and street scale urban design, perceptions of human scale are related to building heights and signage, perceptions of coherence are related to consistency of building heights, and sense of enclosure is related to building/element spacing and tree canopy." In relation to this concept, how can form influence residents' lives currently residing there, or residents relocating there?

Neighborhood planners need to think about implementing diverse forms and analysis of what existing neighborhoods lack. Understanding the existing context and the type of

building typologies allows designers to engage in interventions of new forms to relate to humans' everyday lives. Understanding the physical makeup of a city and how it has changed through time can be accomplished by studying its urban typologies. These studies of urban typologies can begin with figure ground mapping and developing them further to include programs and street-scapes.

Urban form can influence the social and economic outcomes of a city. For example, the spatial arrangement of housing, businesses, and public spaces can impact access to resources and opportunities, as well as social interactions and community cohesion. The design of streets and transportation infrastructure can also affect traffic flow and pedestrian safety. Therefore, it is important for urban planners and designers to consider the social and economic implications of their design decisions.

Urban form is a complex and dynamic system that is shaped by both human agents and their physical environment. By studying and analyzing the different elements that make up urban form, urban planners and designers can create frameworks that improve the quality of life for residents and promote sustainable and equitable development.



Figure 1.1.12 - Mandelbrat set, a mathematical fractal (left), Venice's fractal urban fabric (center), Eiffel Tower fractal (right)

FIGURE GROUND ANALYSIS

"A fabric consists of a pattern, order; this is similar to how the city functions. The physical form of towns and cities. Like textiles, urban fabric comes in different types of weaves" (Artibise). We are able to study the spatial qualities in between the built and unbuilt forms through figure ground mapping. Figure ground maps illustrate the relationship between the built form's spaces and its material or solid components. Solids that are physically present in space are considered positive spaces. Negative spaces are the spaces around and in-between the figures. These two-dimensional studies are a good technique to examine the direction of development, as well as the general shape of the city.

The University of Manchester walks through figure ground studies and creates a tool kit in understanding this type of analysis. In their toolkit, they state, "Figure ground represents a minimalist, but important, spatial analysis map that can give useful information about the shape, scale, pattern and density of buildings, in addition to the nature of spaces created between them. This piece of analysis comes early, and its main aim is raising questions that can be explored further using different analytical tools." Figure ground maps can reveal how the space works, which can be hidden in more complex drawings where lines compete with space. It also reveals the continuity of open space. It reveals shape,

scale, pattern, and density of buildings, in addition to the nature of spaces created between them. Lastly, understanding this solid-void relationship is useful in the analysis stage when analyzing space features. This analysis is a good starting point to understand the built forms in the area. Through these studies, we are able to understand density through the amount of built spaces in the area.

Figure ground mapping can also help identify potential opportunities for development or redevelopment in a given area. By examining the negative spaces, urban planners and architects can identify underutilized or poorly designed spaces that could be improved upon. Figure ground maps can aid in the creation of zoning regulations and land-use plans by identifying areas of high and low density, as well as areas with unique spatial qualities that should be preserved or enhanced. Understanding the relationship between solid and void in urban fabric is essential in creating well-designed and livable cities that meet the needs of their inhabitants.



Figure 1.1.13 - Figure Ground Mapping: Slab housing (left), Regular urban block (center), Compact urban block (right)

1.2 DENSITY

COMPONENTS OF URBAN FORM

Density plays a major role in understanding urban form. It is one of the main characteristics (Dempsey). Characteristics of urban form include housing type, street type, and the spatial arrangement. The concept of urban form encompasses nonphysical aspects, such as density. In "Elements of Urban Form", Dempsey states that "urban form is used to describe a city's physical characteristics. This can include the shape, size and configuration of an urban area. There are five key components to urban form, these include density, layout, transport infrastructure, building typology, and land-use." Each of these components are important in understanding urban form.

The first described is density. Density is the measure of the number of people living in the given area. It can be measured as persons per hectare (pph) or dwellings per hectare (dph). The function of cities is significantly influenced by density. The commonly held belief that cities function more effectively when residents live in denser urban surroundings has led many urban planners to advocate for higher densities. "Density is also closely linked with the configuration of the social environment and interaction within residential neighborhoods: flats and apartments are examples of high density housing whereas detached and semi-detached properties tend to be of lower densities" (Dempsey).

Secondly, layout is the spatial arrangement and configuration of elements of streets, blocks, and buildings. This is in relation to the built form of the environment. Layout focuses on the best ways to construct and arrange the components of the public realm to give everyone a positive experience (Dempsey).

Third, transport infrastructure is closely associated with accessibility as it determines how buildings, spaces, and places can be reached. A functional transportation system is necessary for the growth of cities, regions, and economies (Dempsey).

Fourth, building typology includes the characteristics of housing and other buildings in urban settlements. Building

typology has two distinct meanings: a functional typology that divides buildings into categories like hospitals, schools, and shopping malls based on how similarly they are used and second is a typology organizing buildings based on their forms (Dempsey).

Lastly, land-use includes the different functions of the environment. The control of the distribution of land for particular applications is facilitated by land use management (Dempsey).

Characteristics might be extremely specific and include things like building materials, facades, and fenestration, or they can be more general and include things like housing type, street type, and their spatial arrangement, or layout. It should be mentioned that urban form includes both physical and non-physical elements. It is not just about physical features. Density, which is more than just a physical, tangible factor, is used to assess how many people are present in a certain region. Density is directly related to how the social environment is configured and how residents interact within residential areas.

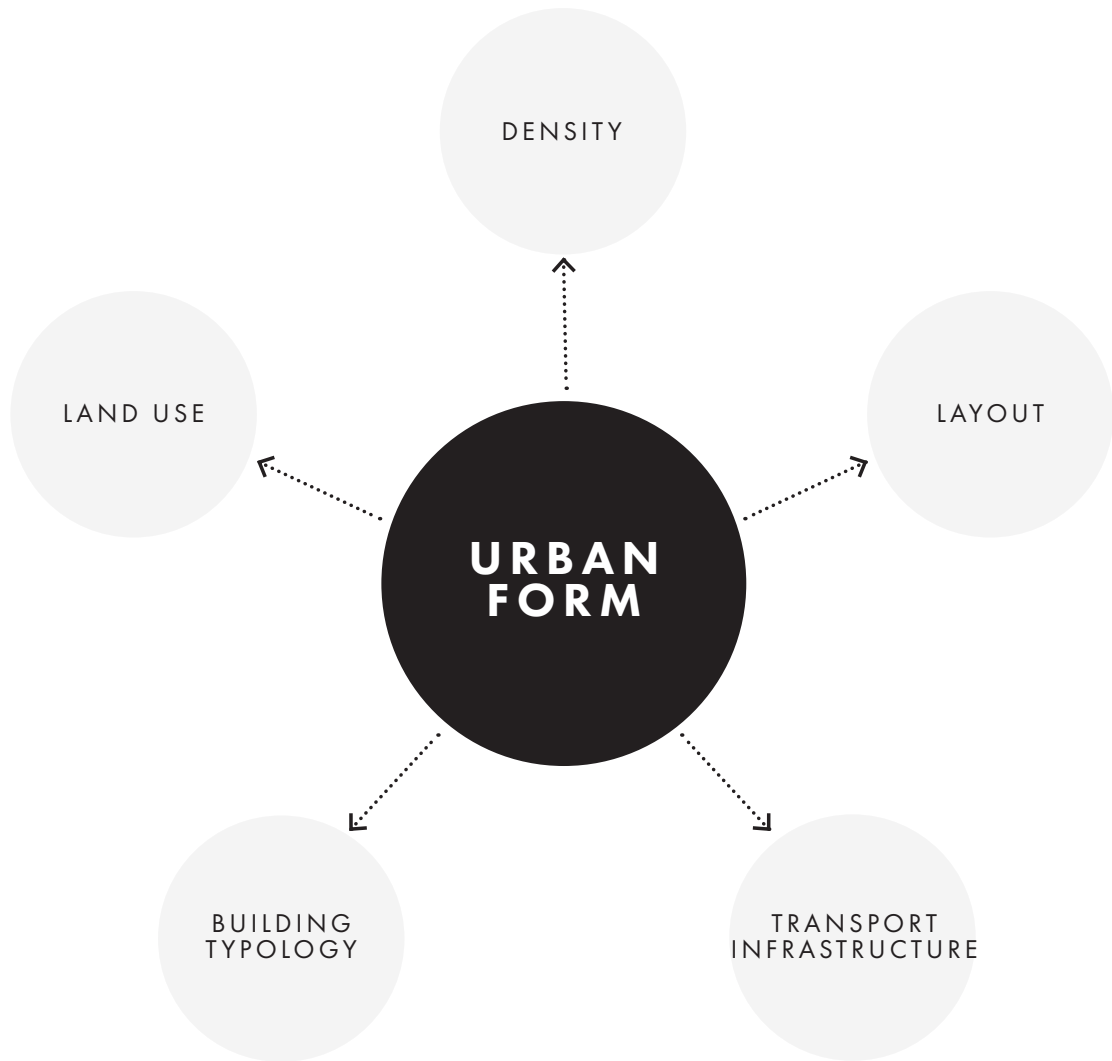


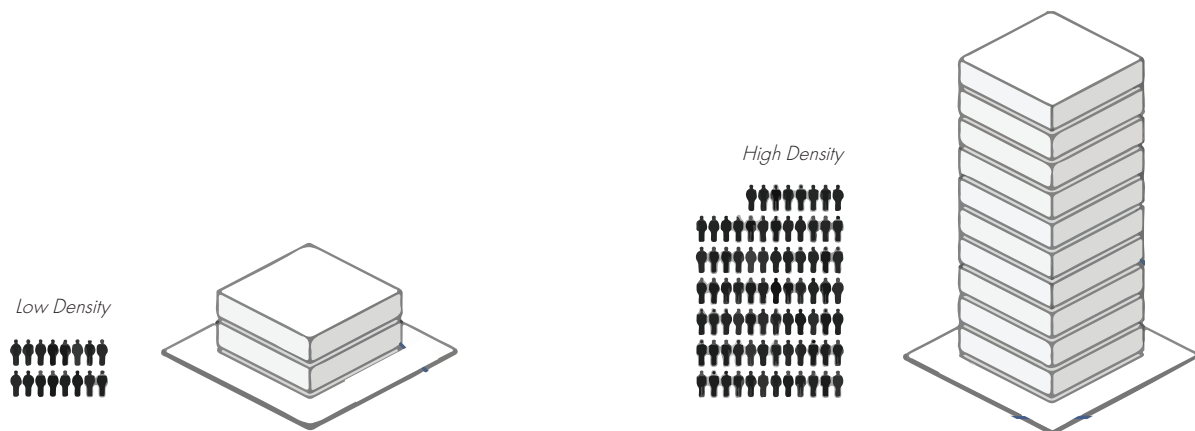
Figure 1.2.1 - Components of Urban Form

URBAN DENSITY

Urban density is used in city planning, urban studies, and related subjects to describe the concentration of people, employment, housing units, building floor area, or some other measure of human occupancy, activity, and development across a certain unit of land. Urban density refers to the degree of population or development concentration or compactness in a city. Living in more densely populated areas has social, practical, financial, and environmental advantages if those areas are planned to be mixed-use, walkable, and pedestrian size. Greater density is necessary to build vibrant communities with lots of amenities. With such programs nearby, it makes life convenient and enjoyable by allowing for attractive public spaces, a high rate of pedestrian traffic, and minimal car use. Based on the range of building scales and density types that are available to residents at different phases in their lives, various demographic groups can pick how they would like to live. For example, a large number of young people are moving back to the city in desire of a more improved lifestyle; they do not choose to reside in distant areas or far from conveniences and their place of employment.

A neighborhood's livability as an urban area is largely dependent on urban density and mixed-use areas. The likelihood of local employment is higher in mixed-use

neighborhoods. The average number of people, households, square feet, or housing units on a plot of land is referred to as density, and is typically expressed in residences per hectare. Urban area densities can be determined in a variety of ways: floor area ratio, residential density, and population density. Floor area ratio is the sum of all structures' floors divided by the size of the land parcel on which they are situated. Residential density is the quantity of homes in a particular area. Lastly, population density is the amount of people living in any particular region (Lehmann).



LOW-SCALE HIGH-DENSITY

A forty-year-old alternative to the high-rise paradigm that dominated American public housing at the time was low-rise, high-density housing. Low-rise, high-density housing placed an emphasis on cutting-edge housing typologies and experimental sorts of organization at a livable and sociable scale in an effort to combat the perceived inhumanity of large-scale urban regeneration. Architects still use this concept today. In the words of an exhibition at New York's Center for Architecture, low-rise high-density is "dense enough to support public transportation, yet low enough to avoid dependence on elevators." A variety of public transit alternatives, accessibility to urban amenities, a moderate scale, public open space, and individualized housing are some of the best qualities of low-rise, high-density housing that aims to blend both urban and suburban development ideas.

Urban Omnibus, a *A Publication of the Architectural League of New York* walks through some case studies that implement low-scale high-density design. They state that "Viable for both suburban and urban sites, low-rise, high-density housing attempted to bring together the best of both worlds: dense enough to achieve urban benefits such as access to public transportation and civic and commercial amenities, while also providing a sense of individual identity for residents and accommodating an integration of open space" (Kubey). The challenge for designers and planning departments is to show

that it is possible to intervene in traditional residential neighborhoods and that doing so can be necessary from a social, environmental, and economic standpoint in order to ensure the future of our cities. In *The Guardian*, Lloyd Alter states "Goldilocks density: dense enough to support vibrant main streets with retail and services for local needs, but not too high that people can't take the stairs in a pinch." Low-scale high-density is the best of both worlds in urban planning.

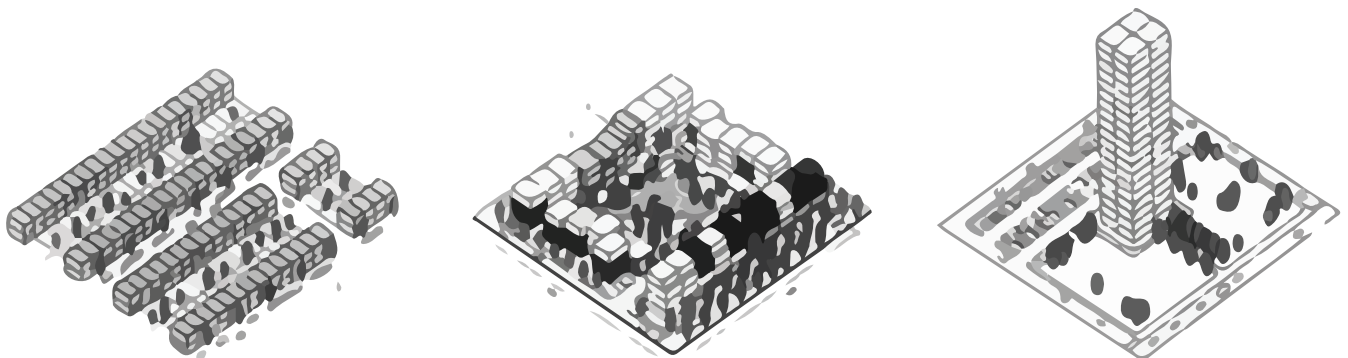


Figure 1.2.3 - Different ways dwellings are visualized; rows of terrace houses (left), perimeter block (center), single high-rise tower (right)

1.3 HOUSING TYPOLOGIES

DIFFERENT HOUSING TYPES

One of our most fundamental necessities is housing. Housing not only serves as the foundation for shelter, but it also gives us a platform to express our cultural values and personal interests. The housing options that are available in a community define its neighborhoods. Diverse housing types occur when there is a wide range of available housing options, including condos, town homes, apartments, and single-family homes, offered at a range of price points. There are many different housing options available today, which makes it easier to meet the housing demands of a wide range of family kinds and people at various phases of life. A variety of preferred dwelling types will exist within each recognized demographic group. A range of housing types boosts residential density, which helps build a neighborhood's population to a size that can sustain a thriving community. More diversified citizens result from mixed housing types and this rise in population density, and usually translates into a wider choice of services being supported within biking or walking distance. By offering adequate and affordable housing options that are all within walking distance of places they are already familiar with, housing variety also aids older residents. Designing housing forms for a diverse range of residents, will attract people to move to that specific neighborhood location.

Diversity in housing could improve neighborhood stability. The number of foreclosures was lower in locations with a more diverse housing stock, on the other hand, foreclosure and sale rates are greater in areas with fewer housing diversity. Or it can compel families to relocate further from where they want to be, potentially raising their transportation costs. Greater housing options provide for both the capacity of new people to find housing as well as the ability for existing residents who must adapt to life changes to stay in the neighborhood, strengthening a community's resilience to shifting economic and market conditions. However, different housing styles don't coexist; they create wonderful communities when they are skillfully arranged to create dense, thriving neighborhoods and districts. Property value will increase with the addition of a wider variety of home types that complement current areas and are consistent with

architectural trends. Buildings with a higher density should be constructed such that they blend in with the neighborhood. How can these housing typologies be implemented in Detroit neighborhoods?

Implementing diverse housing typologies in Detroit neighborhoods could help to address the city's affordable housing crisis and promote community development. Some potential housing typologies that could be implemented include mixed-use developments that combine residential and commercial spaces, co-housing communities that promote shared living spaces and resources, and micro-housing units that offer affordable, compact living options. It is also important to consider the specific needs and preferences of different communities when designing and implementing new housing options. For example, seniors may require accessible and adaptable housing, while families may need larger units with outdoor spaces. By prioritizing diverse and affordable housing options, Detroit can create more equitable and inclusive neighborhoods that meet the needs of all residents. Understanding each of the following housing typologies, will provide us with an improved understanding of these types, their importance, and how they can be applied to existing contexts.

Figure 1.3.1 - A single detached house is a residence that is not attached to any other structures. It is made up of just one dwelling unit and is free of any other buildings on all sides.

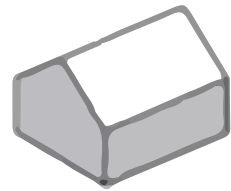


Figure 1.3.2 - A duplex house plan consists of two connected living spaces, with a shared wall between two units. Each unit can take up one or more floors of the building by being placed next to or stacked on top of one another.

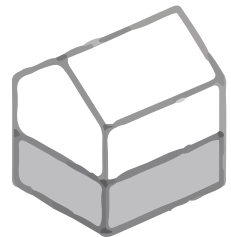
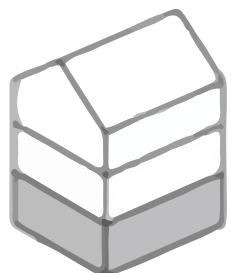


Figure 1.3.3 - Three different homes are combined to form a triplex, each home often shares one or two walls. The stairs are built on the interior to connect the three stories, allowing for interior entry to the three separate units.



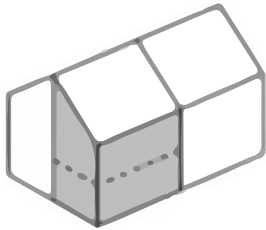


Figure 1.3.4 - A multiplex is made up of five to twelve houses that are stacked or placed next to one another, usually with a shared entrance from the street. A multiplex is a structure with three or more units.

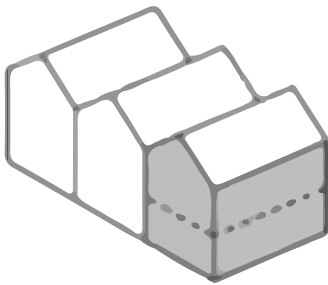


Figure 1.3.5 - A single-family residence with at least two floors that is connected to another home by a wall is referred to as a townhouse. Townhouses are built with a tall and narrow shape for high-density urban situations.

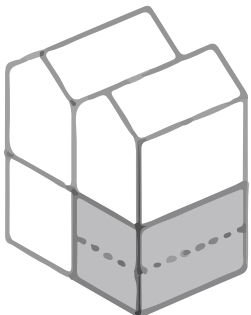


Figure 1.3.6 - A row houses are often a single-family home with its neighbors' units sharing a common wall, roof line, and a uniform external design. Row houses typically have two or three stories.

Figure 1.3.7 - A low-rise apartment building consists of one to four levels and consists of a range of 12 to 40 units per building.

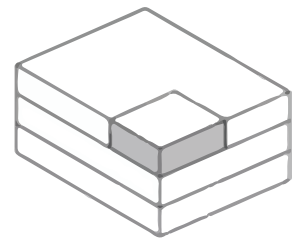


Figure 1.3.8 - Apartment complexes with five to nine stories and consist of a range from 60 to 240 units per building are considered to be mid-rise.

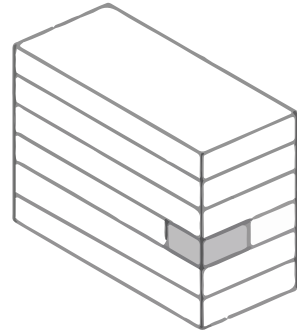
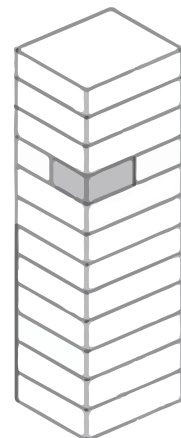


Figure 1.3.9 - High-rise apartment buildings are any buildings that are at least ten floors tall and consist of a range of 60 to 300 units per building. They are usually always to be found in downtown urban settings, and are ideal for places with a high population density.



MISSING MIDDLE HOUSING

Dan Parolek coined the phrase “Missing Middle Housing” in 2010 to draw attention to the need for more housing options in walkable, sustainable neighborhoods, which was prevalent in the 1940s. “Missing Middle Housing is a range of house-scale buildings with multiple units—compatible in scale and form with detached single-family homes—located in a walkable neighborhood” (Missing Middle Housing). A variety of multi-family or clustered dwelling styles that are scale-compatible with single-family or transitional communities are referred to as missing middle housing. The purpose of the missing middle housing is to provide housing at various price ranges, respond to changing demographics, and satisfy the need for walkable areas. To address the needs of various income groups and age groups, a wider variety of housing options is required. This is the point at which Missing Middle Housing can alter the discussion. The phrase “missing middle” refers to dwelling forms including duplexes, multiplexes, and row houses that were popular in pre-World War II America but are now less prevalent and so “missing.” Missing middle housing places more emphasis on scale and heights that are suitable for single-family areas or transitional neighborhoods than it does on the number of units in a structure. Building forms include duplexes, triplexes, multiplexes, side attached, and row houses that also enhance local retail and public transportation choices while also offering a variety of housing options.

The many housing options offered by the Missing Middle Housing types encourage walk-ability, locally-serving retail, and public transportation options while blending smoothly into existing residential areas. Missing Middle building types share the ideas of a pedestrian-friendly environment, compact buildings, a perceived lower density, smaller, well-designed units, fewer off-street parking places, straightforward construction, and an intentional “feeling of community” To address the mismatch between the available housing stock in the United States and increasing demographics paired with the rising demand for walk-ability, they offer solutions across a range of affordability. Missing Middle Housing is largely concerned with the shape and size of these structures,

which are intended to offer more housing options in low-rise walkable districts. The forms of these housing typologies allows for a diverse range of residents, as well as creating these in between spaces and designing for the elements of a city through its form.

Middle housing can be made to look and feel like single-family homes, although containing numerous living units. These forms of homes can be an excellent choice for infill development, assisting towns in increasing their housing supply without the need for more urban expansion. Developers can make use of small or irregularly shaped properties that would otherwise be vacant or underutilized, thanks to their modest footprint and variety of conceivable arrangements, including stacked, side-by-side, or clustered units.

Americans desire and require a wider variety of affordable, environmentally friendly, and attractively constructed homes in walkable neighborhoods. The President and CEO for New Urbanism Lynn Richard states “If there’s one thing Americans love, it’s choices: what to eat, where to work, who to vote for. But when it comes to where we live or how to get around, our choices can be limited. Many people of all ages would like to live in vibrant neighborhoods, downtowns, and Main Streets—places where jobs and shops lie within walking distance—but right now those places are in short supply. ‘Missing Middle’ Housing provides more housing choices. And when we have more choices, we create living, thriving neighborhoods for people and businesses.”



MISSING MIDDLE

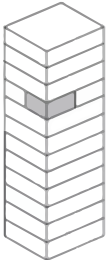
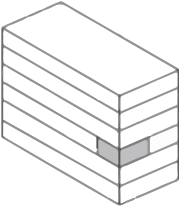
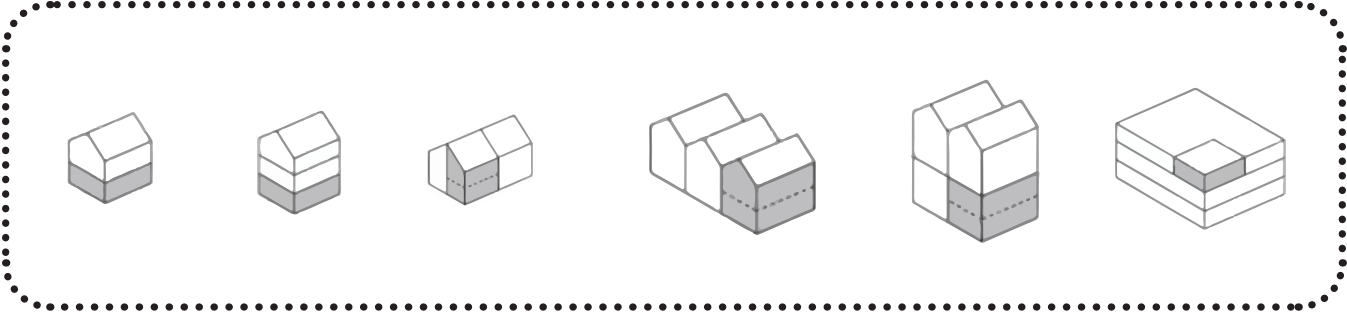


Figure 1.3.10 - Missing Middle Housing

02

2.1 HISTORY

DETROIT THROUGH TIME

Detroit has gone through an extensive decline over the past 50 years. Understanding Detroit's history will allow for an understanding of its current status of many Detroit neighborhoods that are abandoned and vacant, but can be revitalized for future use. These buildings hold the architectural character and history of the city, and are an opportunity for reuse and revitalization within Detroit.

With a recent upbringing of new builds and renovations of existing buildings, an important question emerges: what is Detroit going to do with its blighted neighborhoods? This will allow for the abandoned houses to be reused and for blighted property to be repurposed into a new flourishing community that allows for residents to acquire the needs and resources they need on a daily basis.

1701-1778

Europeans arrived in Detroit when the colonial French built a fort here to serve as a commercial hub. Detroit, the third-largest city in the British Province of Quebec, with a population of 2,144. The British believed it to be a part of Quebec at this time rather than one of the Thirteen Colonies.

1910-1920

Europe as well as African Americans were drawn to numerous Northern towns, including Detroit. Many people moved to Detroit because of the attractive career prospects in the developing auto sector and the affordable housing.

1920

Black Americans left the South in search of better opportunities and to avoid Jim Crow restrictions during the Great Migration. Many of the 1.5 million black individuals who left the South in search of opportunity in the Northeast and Midwest during the first half of the 20th century arrived in Detroit during the first wave.

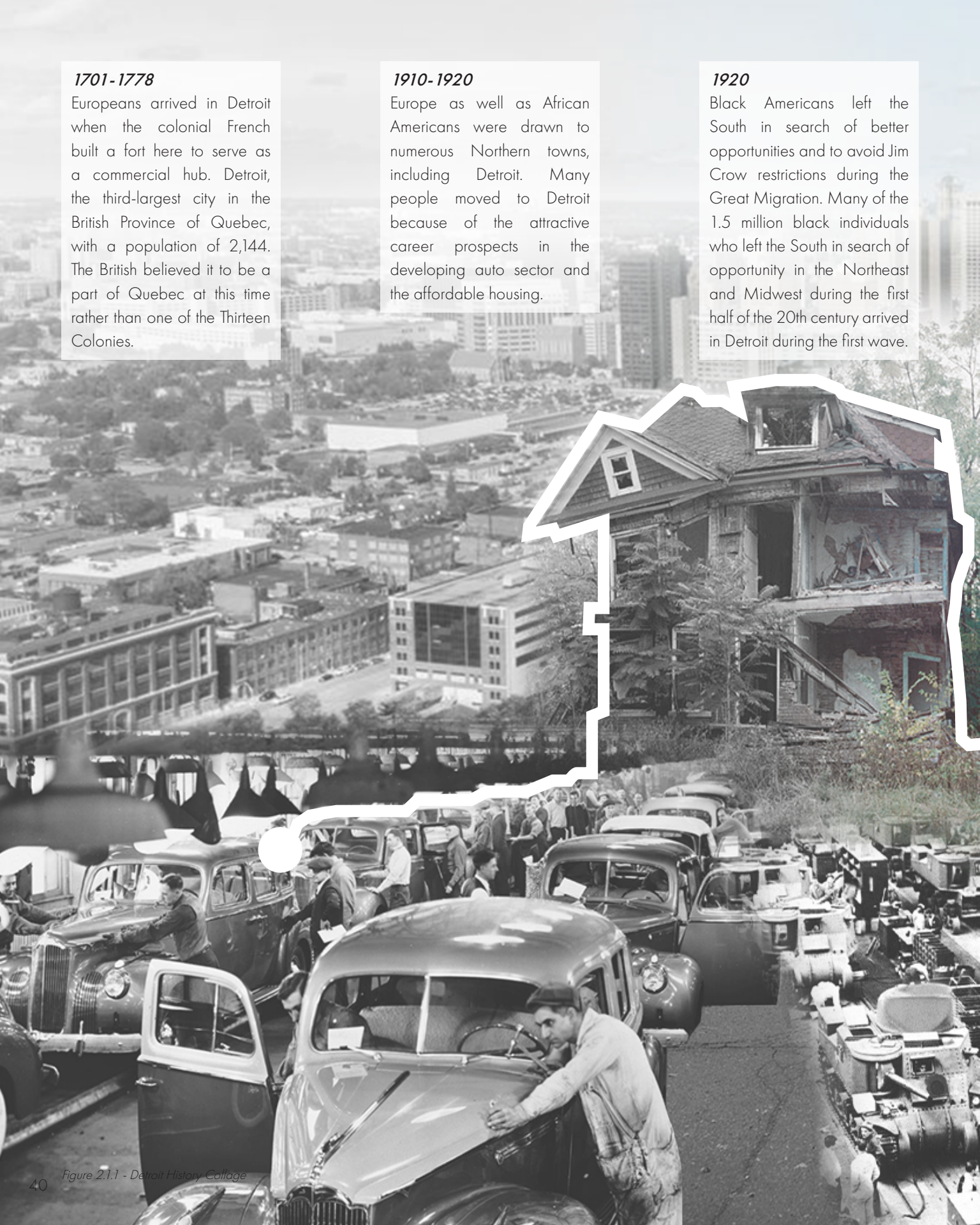


Figure 2.1.1 - Detroit History Collage

1940-1950

Booming sectors drew a lot of workers because there were more jobs available and the pay was greater. With 1.8 million residents, Detroit was the fourth-most populous city in the country.

1950-1960

Michigan accounted for 56% of all automotive jobs in the US in 1950. That had decreased to 40% by 1960. Due to forced layoffs at many of the factories where thousands of Detroiters had worked, they were compelled to look for work elsewhere.

1967

The 1967 Detroit riot, which was caused by decades of segregation in Detroit, only made the problem of white flight worse. A significant amount of tax money was lost by the city, and many areas lost important commercial hubs and markets, which fueled a vicious cycle of underinvestment and population loss.



1980

The population of Detroit decreased by 20%, with blacks making up 60% of the population.

2000

Depopulation was caused by a number of factors, including the housing crisis, and the city now has a large number of abandoned structures.

TODAY

In 1950, there were 1,849,568 people living in Detroit; today there are fewer than 700,000. There is also a start of a new upbringing with new builds and renovations of existing structures + neighborhoods.

2.2 DEMOGRAPHICS

EXISTING HOUSING

According to “Detroit, an Abandoned City”, there are “70,000 buildings, 31,000 homes, and 90,000 vacant lots abandoned in Detroit.” The current status of many Detroit neighborhood homes are abandoned and vacant, but can be revitalized for future use. These vacancies of housing and lots are caused by foreclosures, mortgage defaults, unpaid taxes, economic transition, and loss of good paying jobs for low class families. However, the revitalization of Downtown Detroit has not yet extended beyond that area. The city has seen a large number of people, but since then, beauty has increased and will continue to do so in the future.

The City of Detroit is advocating for deconstruction as opposed to the destruction of old buildings. Demolition involves ripping down structures and only increasing the amount of trash dumped in landfills. Deconstruction, on the other hand, will enable materials to be reused, adding value to these features. In addition to saving money for future projects, this preserves the historical significance and character of the architecture. A master plan to build new housing typologies to execute within Detroit can be developed using vacant land. This will make it possible to reuse existing resources, erect new structures, and put unused land to better use. A quote from Howie Kahn states, “No other city of Detroit’s magnitude has the opportunity to begin again. Starting over now? It’s not exactly the kind of thing we do in America’s cities. We don’t go backward, we don’t clear-cut, we don’t shift toward empty to become full again. What happens next is really the great urban experiment of our time. How the city will be remade, and whether it really can be, will polarize. Planning wonks and architects, landscapers and CEOs, residents and visitors, even people who have never been to the city, all seem to be watching, harboring opinions and dream scenarios like kids playing with legos.” This city can only grow if creative new urban planning ideas are implemented. Next, perform an urban analysis.

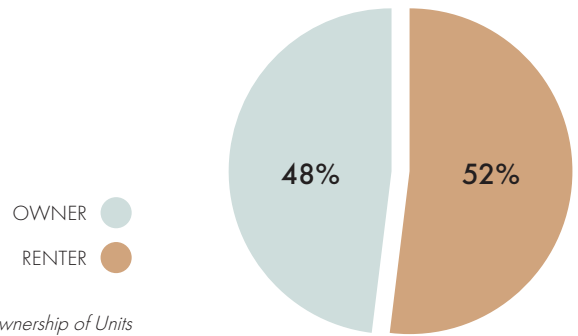


Figure 2.2.1 - Ownership of Units

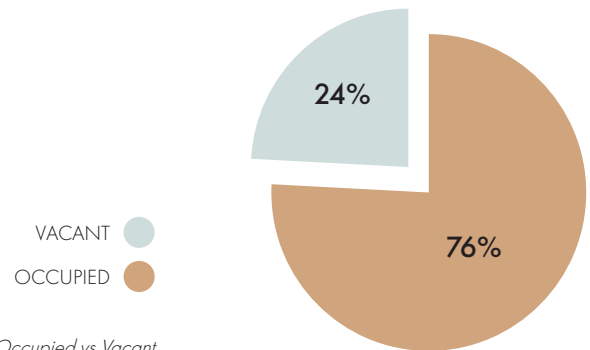


Figure 2.2.2 - Occupied vs Vacant

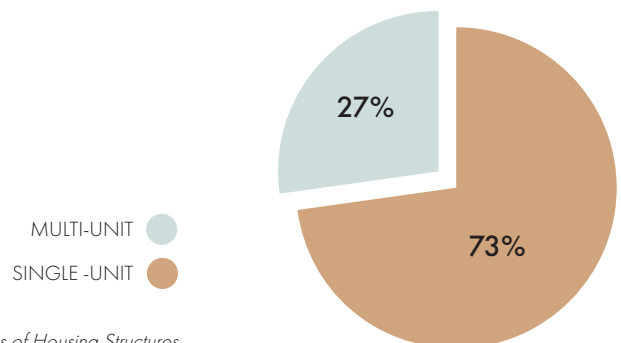


Figure 2.2.3 - Types of Housing Structures

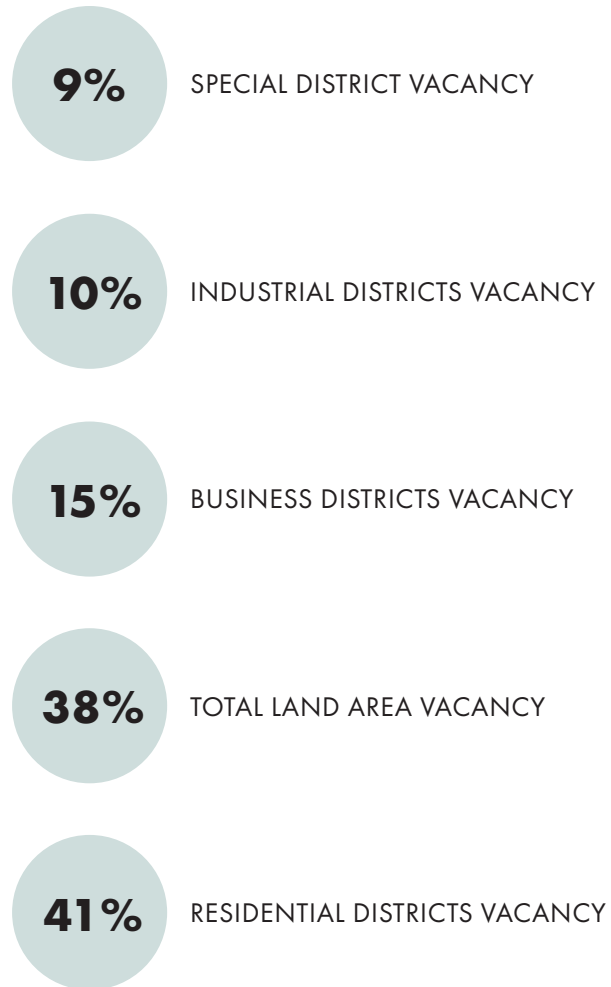


Figure 2.2.4 - Vacancy Data

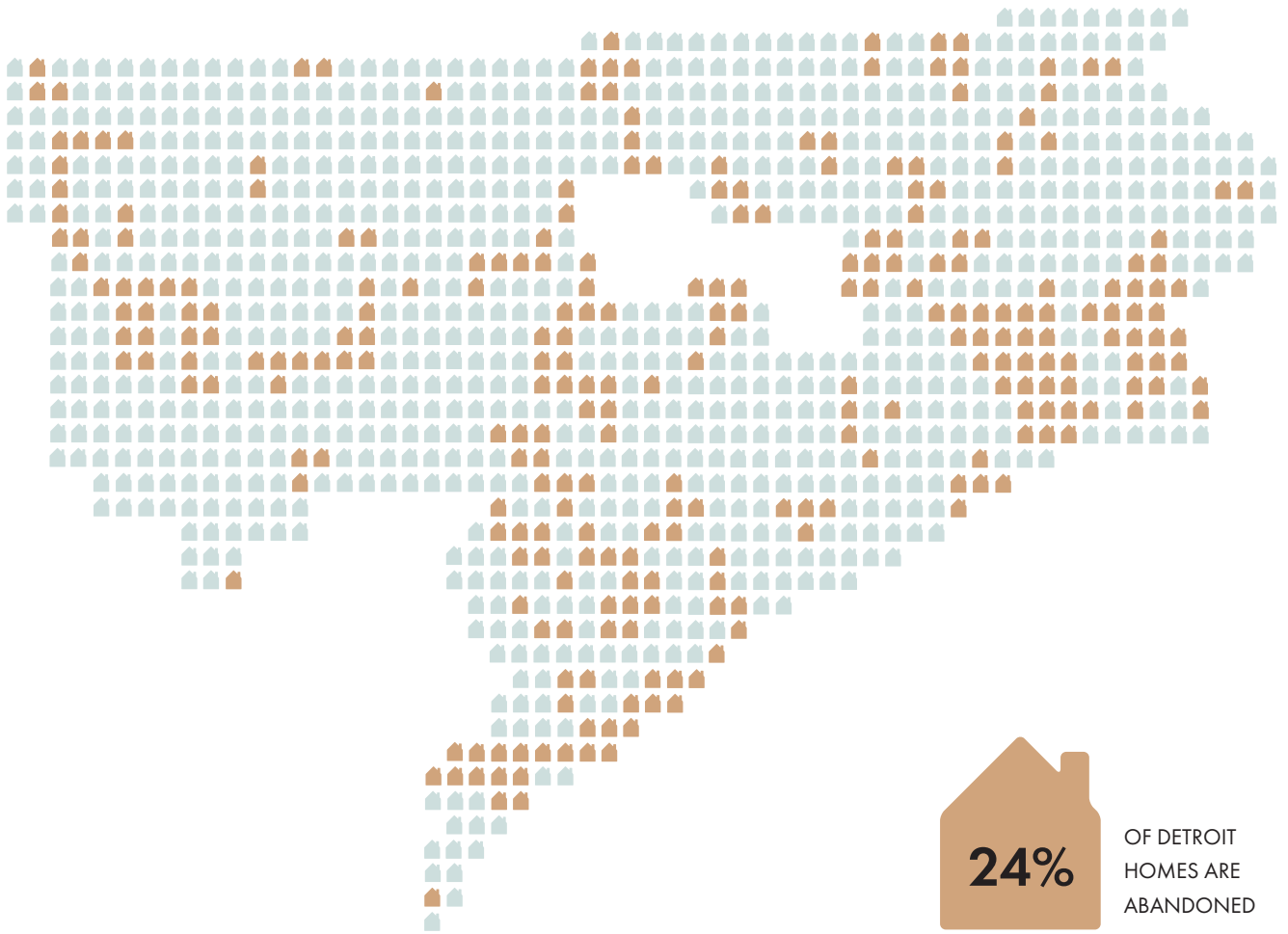


Figure 2.2.5 - Detroit Housing Vacancy Map

DETROIT

MICHIGAN, USA

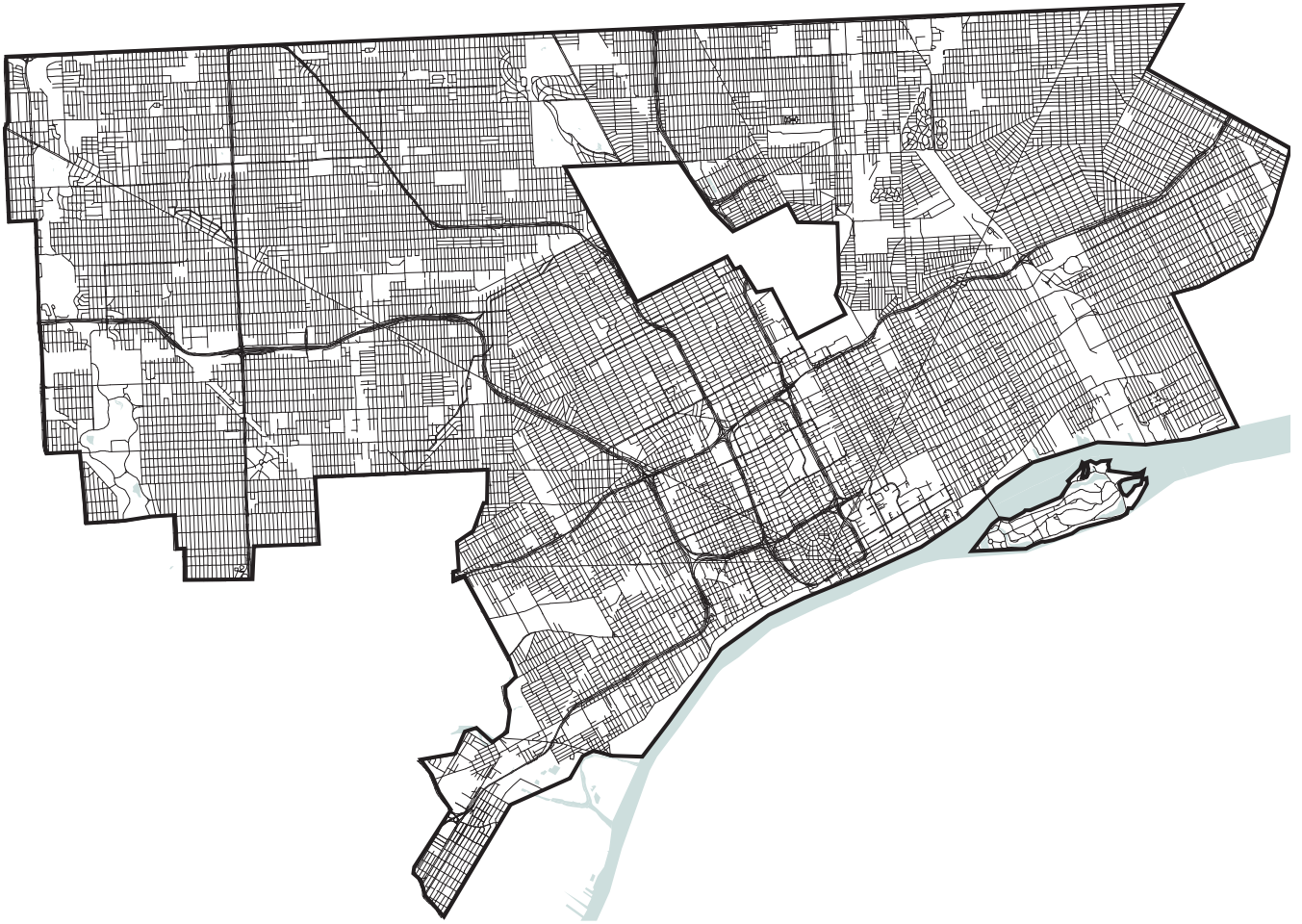


Figure 2.2.6 - Detroit Map



Figure 1. Detroit Neighborhood





Figure 2.2.8 - Detroit Housing



Figure 2.2.9 - Detroit Housing



Figure 2.2.10 - Detroit Housing

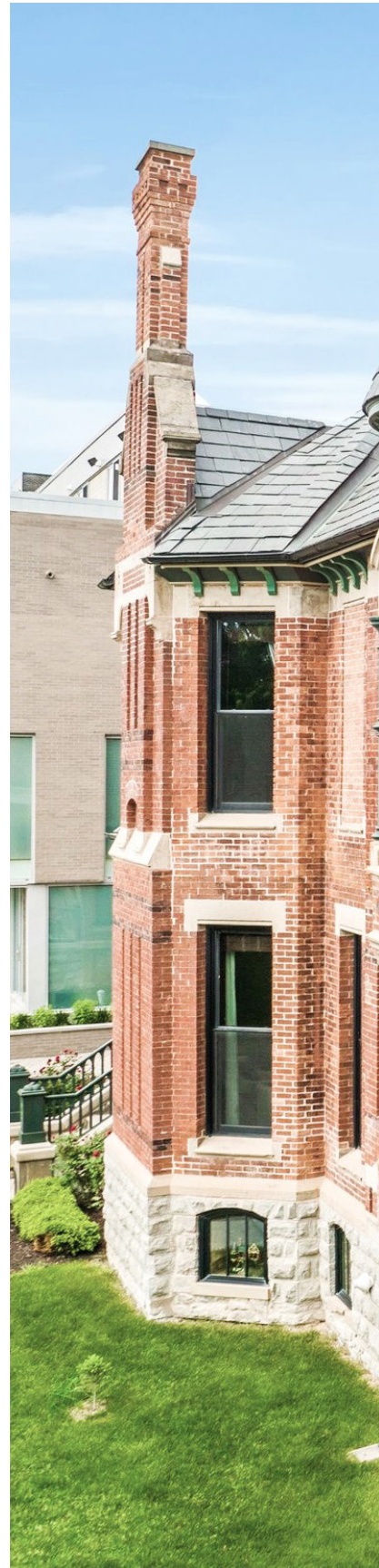


Figure 2.2.11 - Detroit Housing



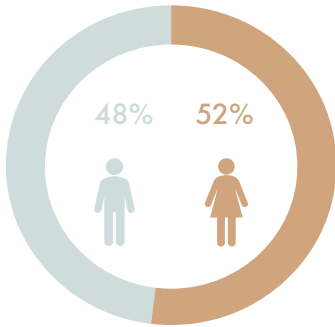


Figure 2.2.12 - Detroit Gender

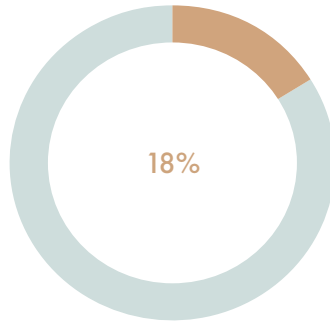


Figure 2.2.13 - Detroit Higher Education

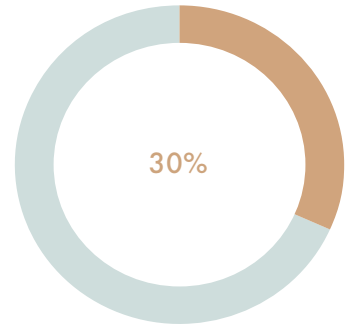


Figure 2.2.14 - Detroit Poverty Rate

Figure 2.2.15 - Detroit Median Household Income

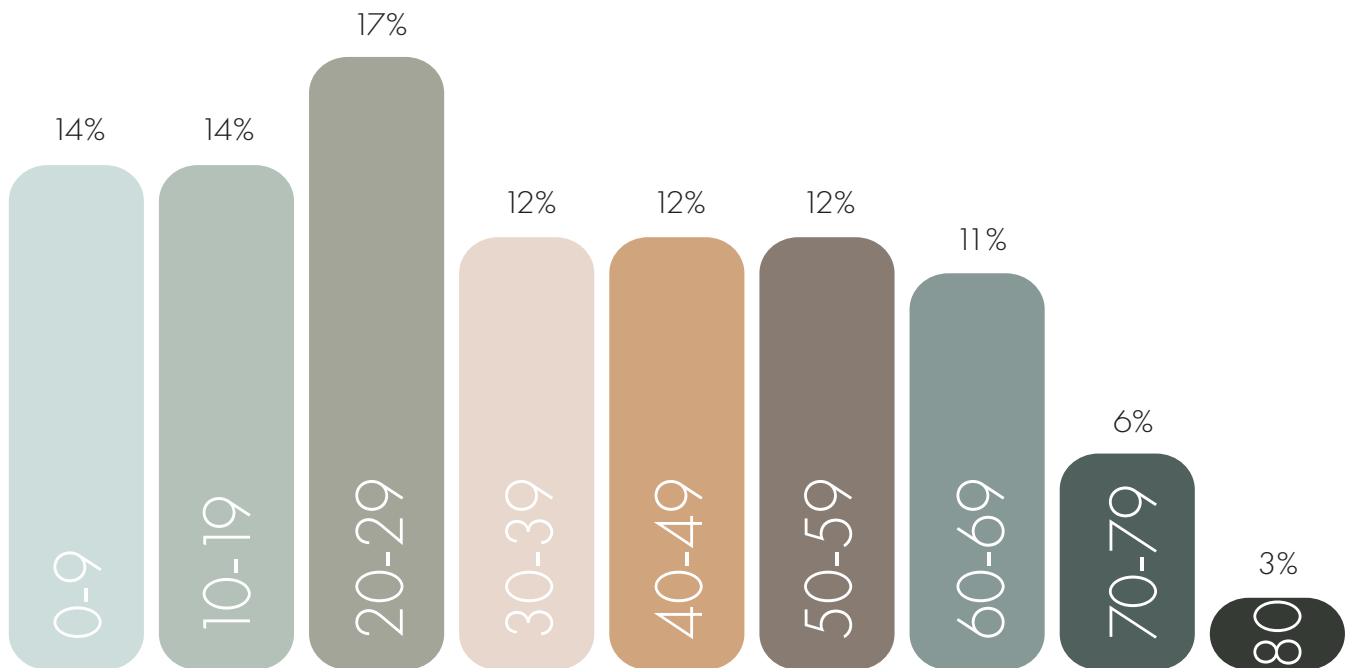
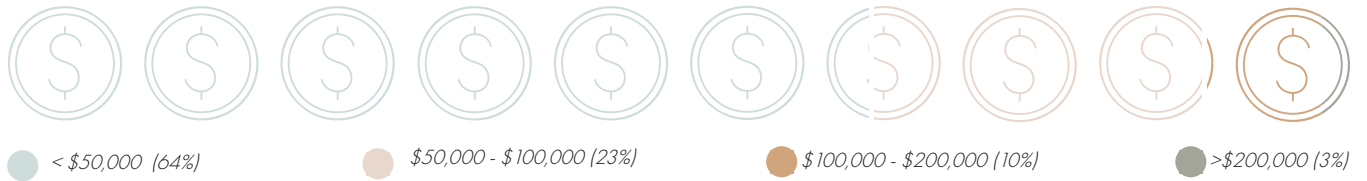
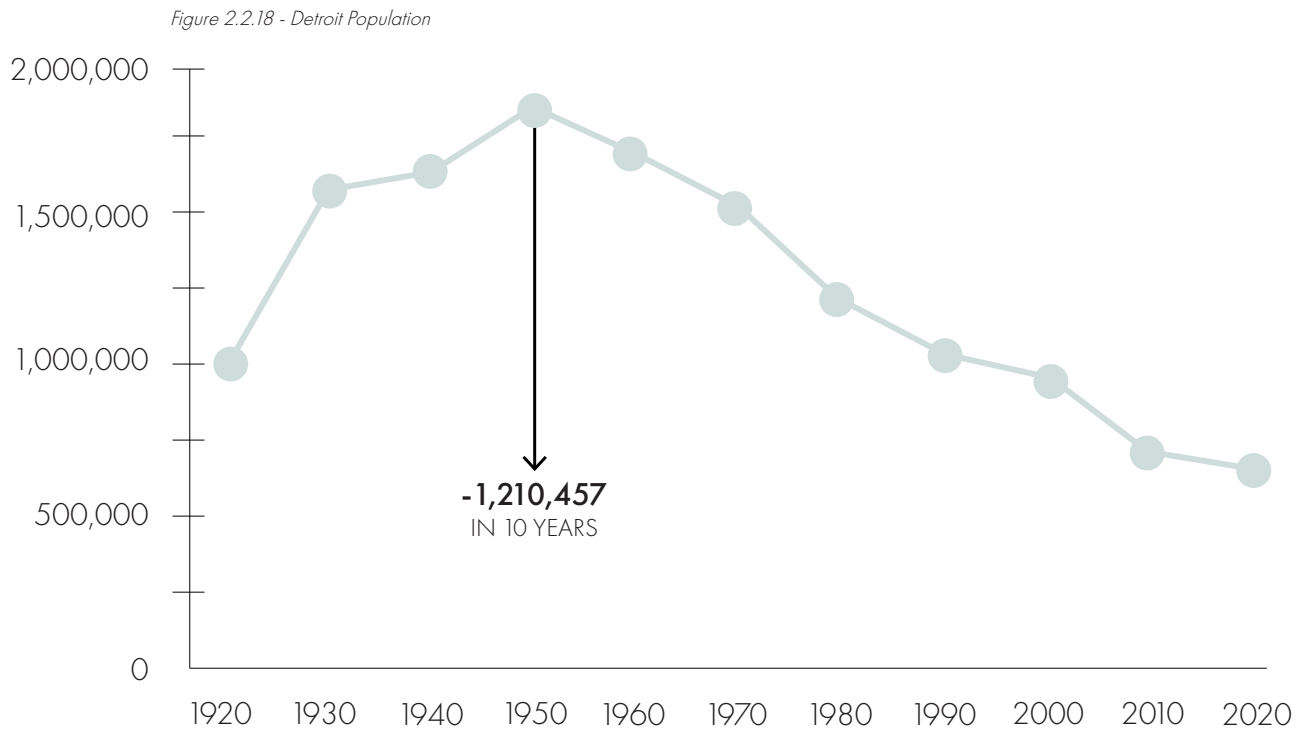
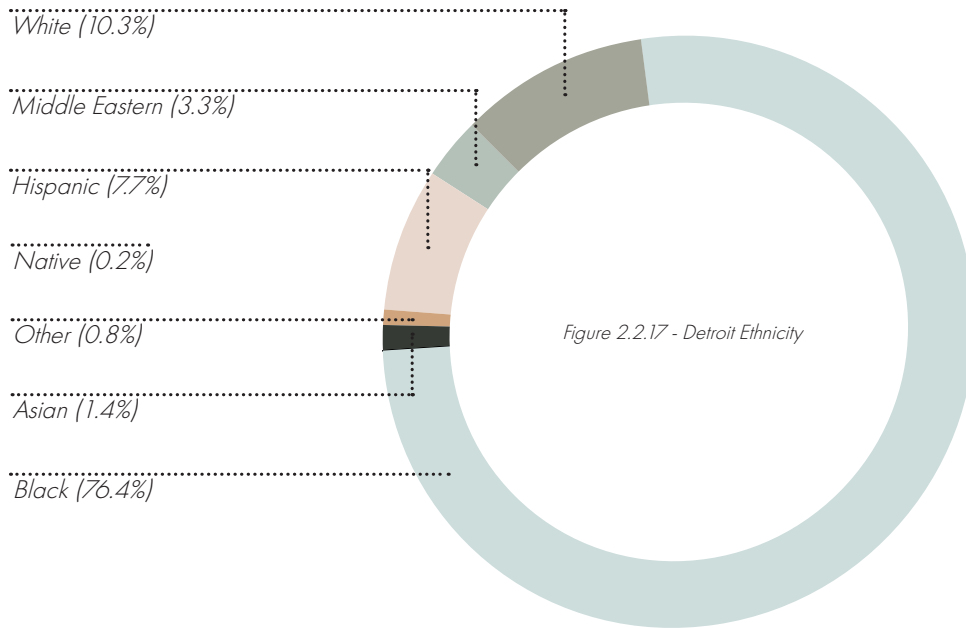


Figure 2.2.16 - Detroit Age



2.3 URBAN FORM ANALYSIS

FIGURE GROUND MAPPING

Understanding that the built environment of Detroit is in a way of being scattered and uncontrolled. Selecting a specific location for this study, the McDougall-Hunt neighborhood, for an analysis of a typical Detroit neighborhood allows for understanding of the city's urban forms. In the figure ground map, you can't really define where the roads are located, but you can see that most of the built environment is the same shape and size. These shapes are the typical single family house. This map creates a better understanding of the building sizes and spaces in between and how these forms relate to one another.

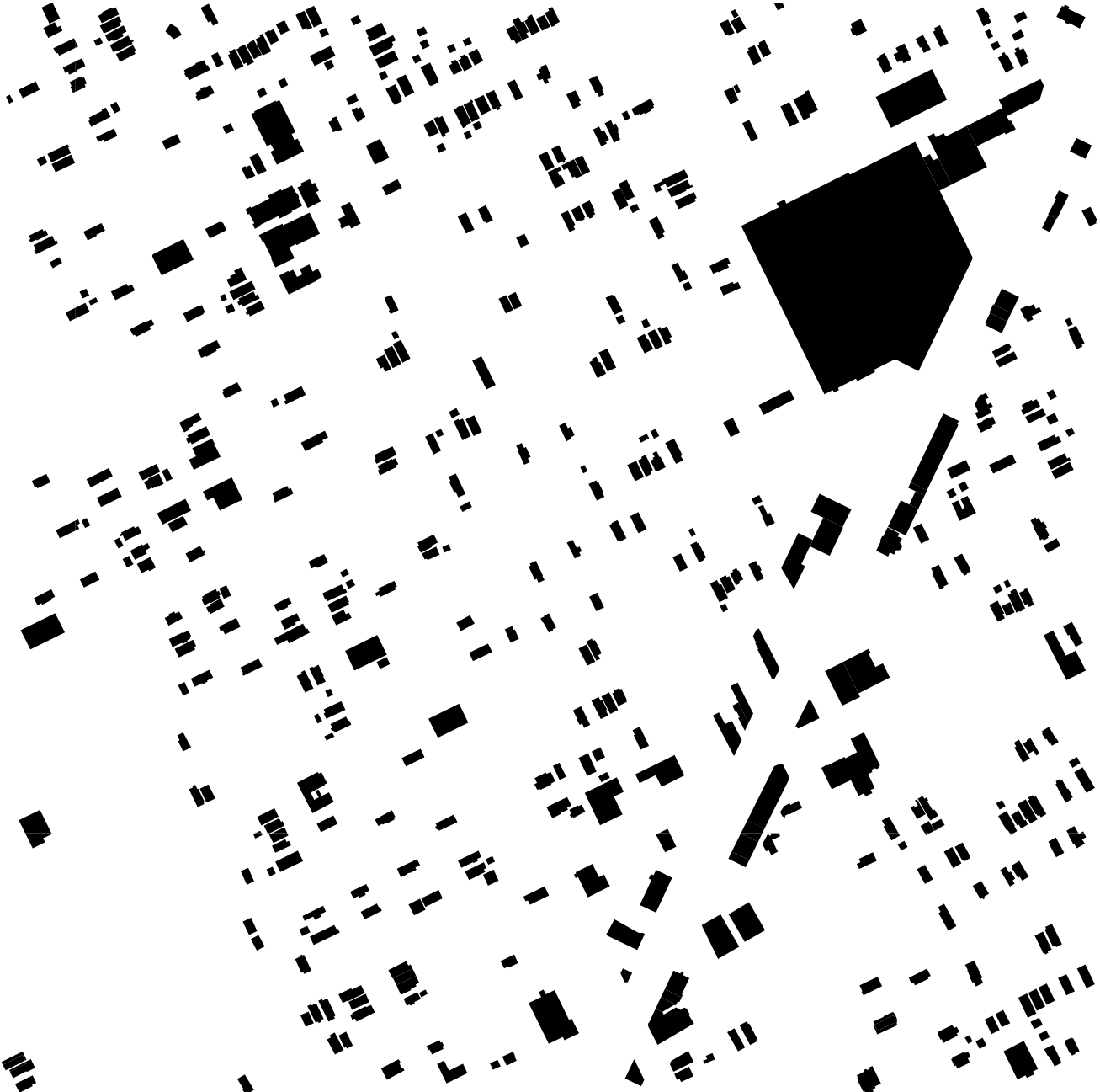


Figure 2.3.1 - Detroit Figure Ground Map

BUILDING TYPOLOGY MAPPING

Developing a building typologies map to grasp an understanding of the type of buildings in the neighborhood. This analysis consisted of utilizing multiple maps and Google Earth to retrieve the data. Going up and down the streets provided an improved understanding of the current conditions that consist of vacant properties and housing typologies of single family homes. There's not a very diverse implementation of housing typologies within this neighborhood. It consisted of only single family houses, along with vacant lots, gas stations, and liquor stores.






- SINGLE FAMILY HOUSES 
- MISSING MIDDLE HOUSING 
- APARTMENTS 
- COMMERCIAL 
- ABANDONED STRUCTURE 



Figure 2.3.2 - Detroit Building Typology Map

2.4 HOUSING ANALYSIS

DETROIT HOUSING

With a population density of around 11,500 people per square mile in 1910, Detroit had risen to become one of the top ten American cities. Today, Detroit's population density is down to roughly 5,000 people per square mile. Detroit neighborhoods are and have been negatively affected by the increased rate of blighted properties within neighborhoods. These properties usually consist of single-family homes. There's been an increase of residents leaving their communities which have contributed to the vacancy issue. There's a lack of diverse building typologies, and can keep residents away from moving into the city. These buildings hold the architectural character and history of the city, and are an opportunity for reuse and revitalization within Detroit.

The city of Detroit had built itself up to be one of independent single-family dwellings, which include Victorians, Neo-Gothics, Boxy Four-Squares, and Greek and Tudor Revivals. Understanding that this is the only housing typology within the city. No other city in the world had as many single-family detached homes as Detroit. Nearly 65 percent of all occupied residential lots in the city are used for single-family detached homes, despite the city losing over a million residents. The percentage of single-family detached homes in Detroit even outpaces the nationwide average of 60 percent for all residential buildings. Although it has become clear that relying primarily on the single-family detached house appears to be one of Detroit's facing issue, it is simple to understand why it is attractive and handy for the American lifestyle, which was figuratively born in Detroit. Detroit is battling to establish itself as a competitive option as other U.S. markets undergo redevelopment and millennials and their parents demand more integrated, walkable, and urban surroundings. In order to compete, we must think outside the box and consider how to design housing that is more flexible, adaptable, and responsive to future housing demands. We need to go beyond the single-family home, which has helped define Detroit, and the idea of "endless progress," which has led us to destroy so many of our communities and homes in order to upgrade to the newest model year.

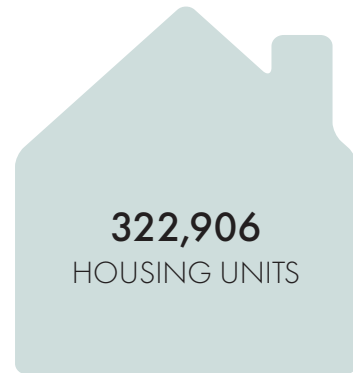


Figure 2.4.1 - Detroit Number of Housing Units



Figure 2.4.2 - Detroit Average Number of Inhabitants per Household



Figure 2.4.3 - Detroit Average Housing Unit Price



Figure 2.4.4 - Detroit Single Family House

2.5 PRECEDENT

CITY MODERN BRUSH PARK, DETROIT, MI

A new chapter in the history of Brush Park begins with the construction of the City Modern project. This neighborhood development combines Brush Park's history with a purposeful mix of modern design and urban life. Brush Park is situated to serve as a creative bridge between Downtown and Midtown, while offering a sustainable, walkable environment for a diverse population (City Modern). As part of the design process for City Modern, collaboration with current inhabitants, city planners, and active community organizations has been crucial. City Modern combines a variety of housing types, architectural aesthetics, historic preservation approaches, and residential unit pricing in order to appeal to a wide spectrum of current and potential Brush Park residents. These housing types include Historic Homes, Town Homes, The Stories, The Residences, Carriage Homes, and The Flats; all in which attract a diverse range of people.



Figure 2.5.1 - Detroit Precedent: City Modern Brush Park



OS

3.1 ANALYSIS OF CITIES

CITIES AS PRECEDENT

Once understanding the current conditions of Detroit, we feel this emotional side of how can we improve the current status of the city. This brings us to want to learn what other successful cities consist of; through form and various building typologies.

Analyzing the urban fabric of cities' in the United States and Europe allows for comparisons in urban density, accessible and sustainable neighborhoods. Boston, Copenhagen, Florence, and Warsaw, are all cities that display a compact way of living sustained through the design of the urban form, specifically through the lens of housing types. Studying the urban fabric of other cities' will allow for quantifying these principles of urban design to the context of Detroit.

BOSTON

MASSACHUSETTS, USA

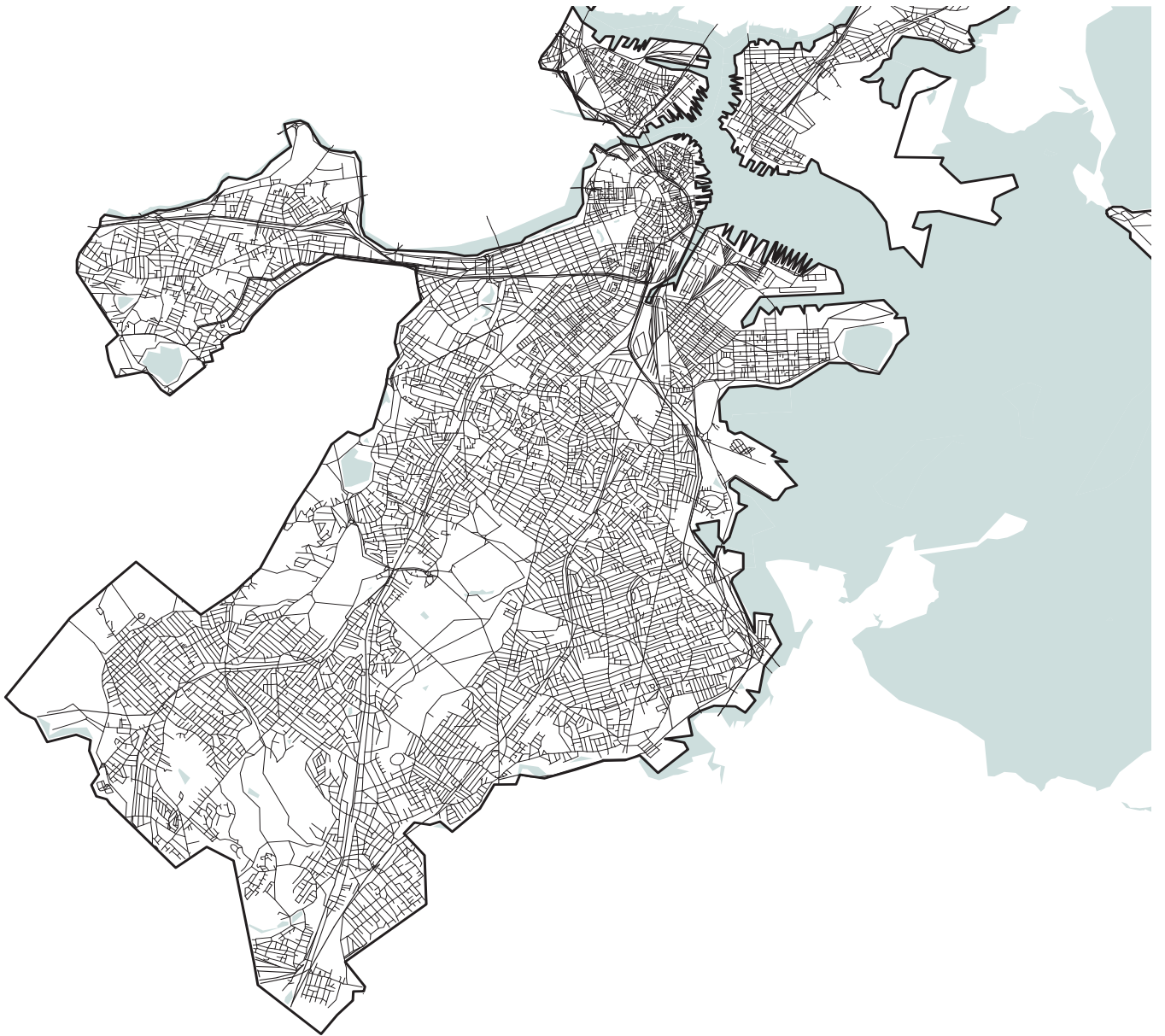


Figure 3.2.1 - Boston Map



Figure 3.22: Boston Neighborhood





Figure 3.2.3 - Boston Housing



Figure 3.2.4 - Boston Housing



Figure 3.2.5 - Boston Housing

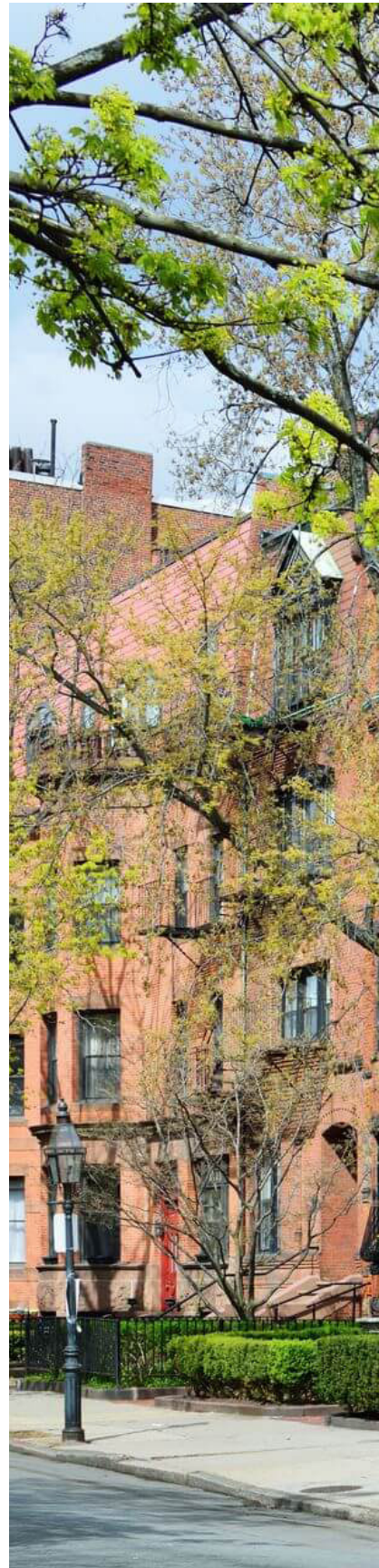


Figure 3.2.6 - Boston Housing



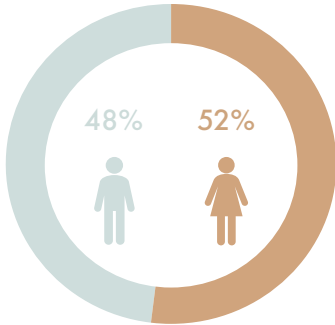


Figure 3.2.7 - Boston Gender

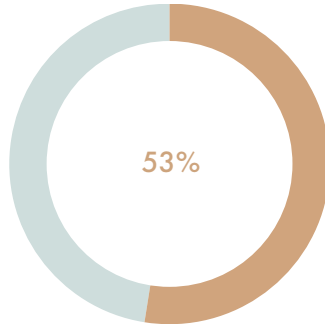


Figure 3.2.8 - Boston Higher Education

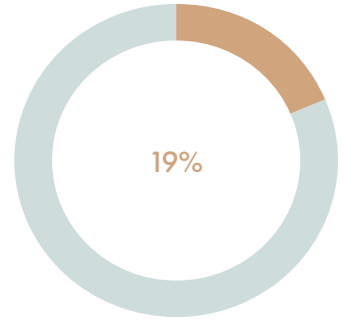


Figure 3.2.9 - Boston Poverty Rate

Figure 3.2.10 - Boston Median Household Income

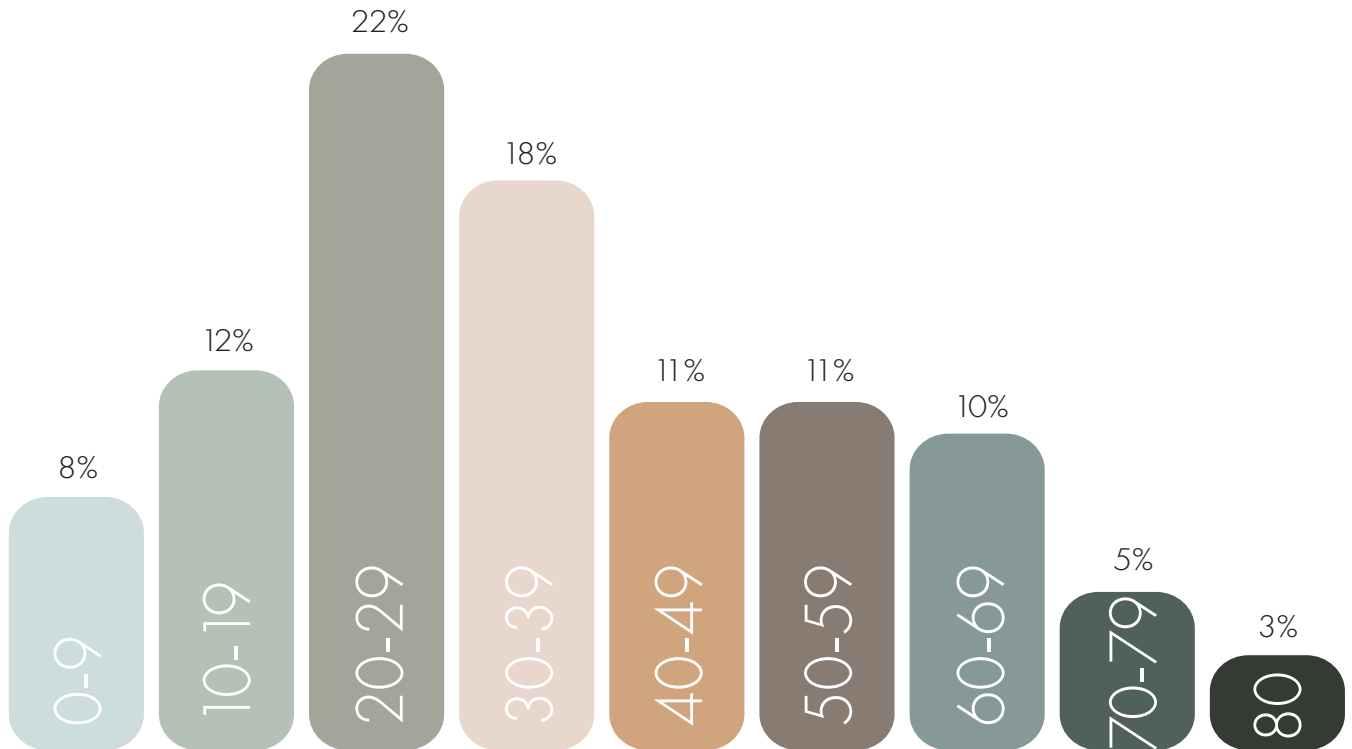
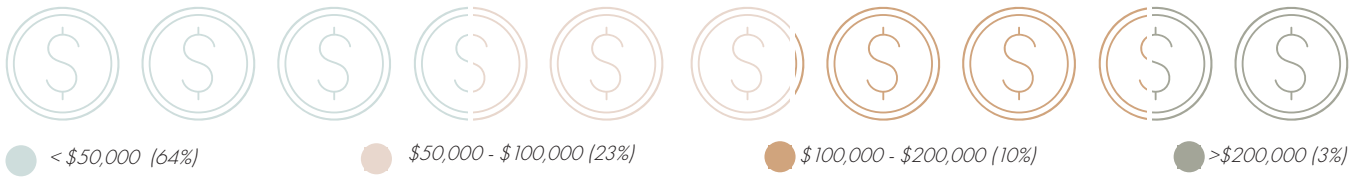


Figure 3.2.11 - Boston Age

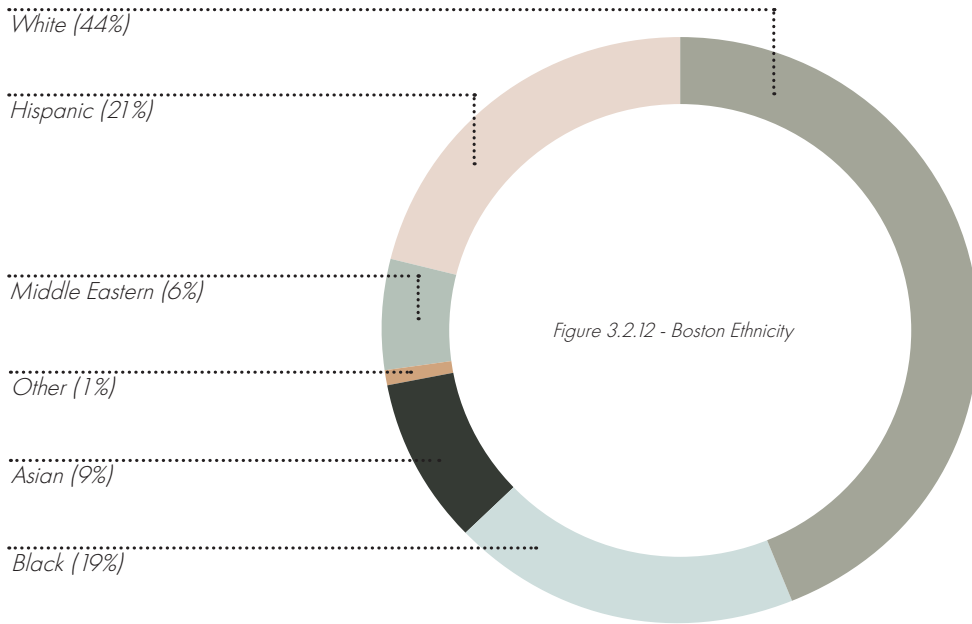


Figure 3.2.13 - Boston Population

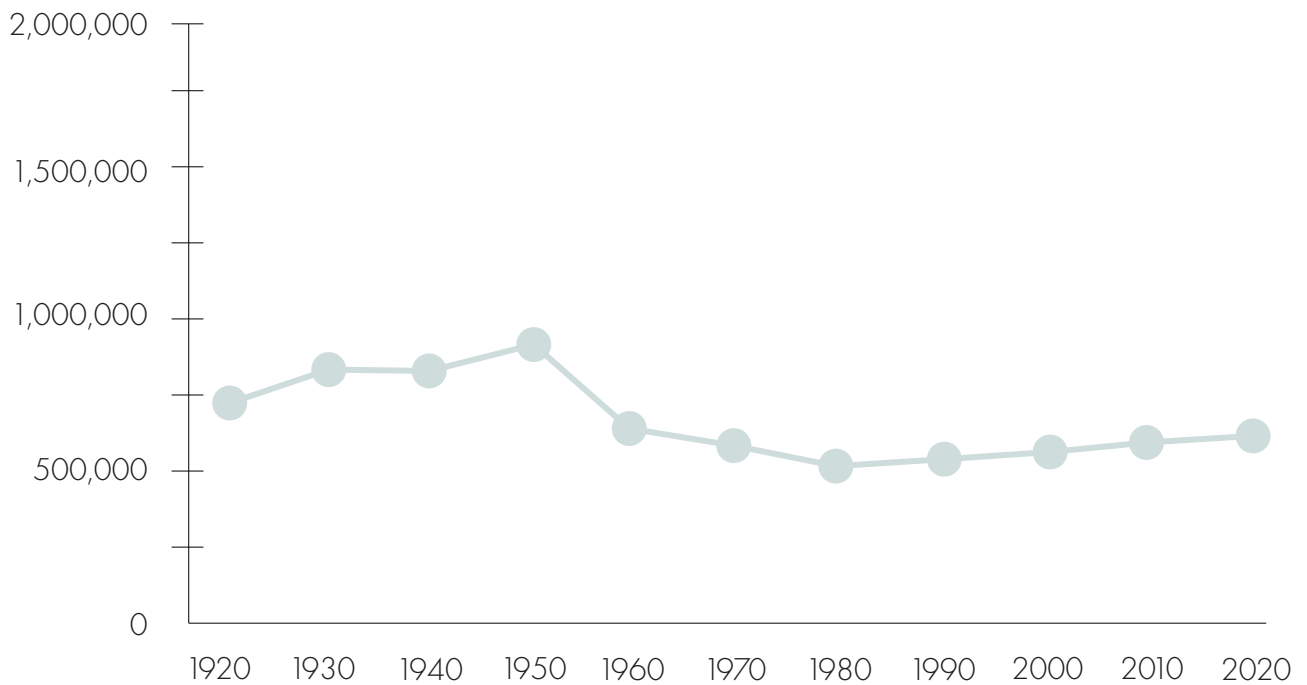


FIGURE GROUND MAPPING






Understanding that the built environment of Boston as being close-knit with one another. Selecting a specific location for this study, the South Boston neighborhood, for an analysis of a typical Boston neighborhood allows for understanding of the city's urban forms. In the figure ground map, you can easily define where the roads are located. Most of the built environment consists of rectilinear forms that line up against the streets. The forms create interstitial spaces allowing for connecting paths, green spaces, and parks to appear. This map creates a better understanding of the building sizes and spaces in between and how these forms relate to one another.



Figure 3.2.14 - Boston Figure Ground Map

BUILDING TYPOLOGY MAPPING

Developing a building typologies map to grasp an understanding of the type of buildings in the neighborhood. This analysis consisted of utilizing multiple maps and Google Earth to retrieve the data. Going up and down the streets provided an improved understanding of the current conditions that consist of similar housing typologies of row houses. There's a diverse implementation of housing typologies within this neighborhood. It consisted of single family houses, row houses, triplexes, town houses, and low rise apartment buildings. The building typologies study made it possible to comprehend the different housing types present here. This allows residents to go around on foot.

- SINGLE FAMILY HOUSES 
- MISSING MIDDLE HOUSING 
- APARTMENTS 
- COMMERCIAL 
- ABANDONED STRUCTURE 

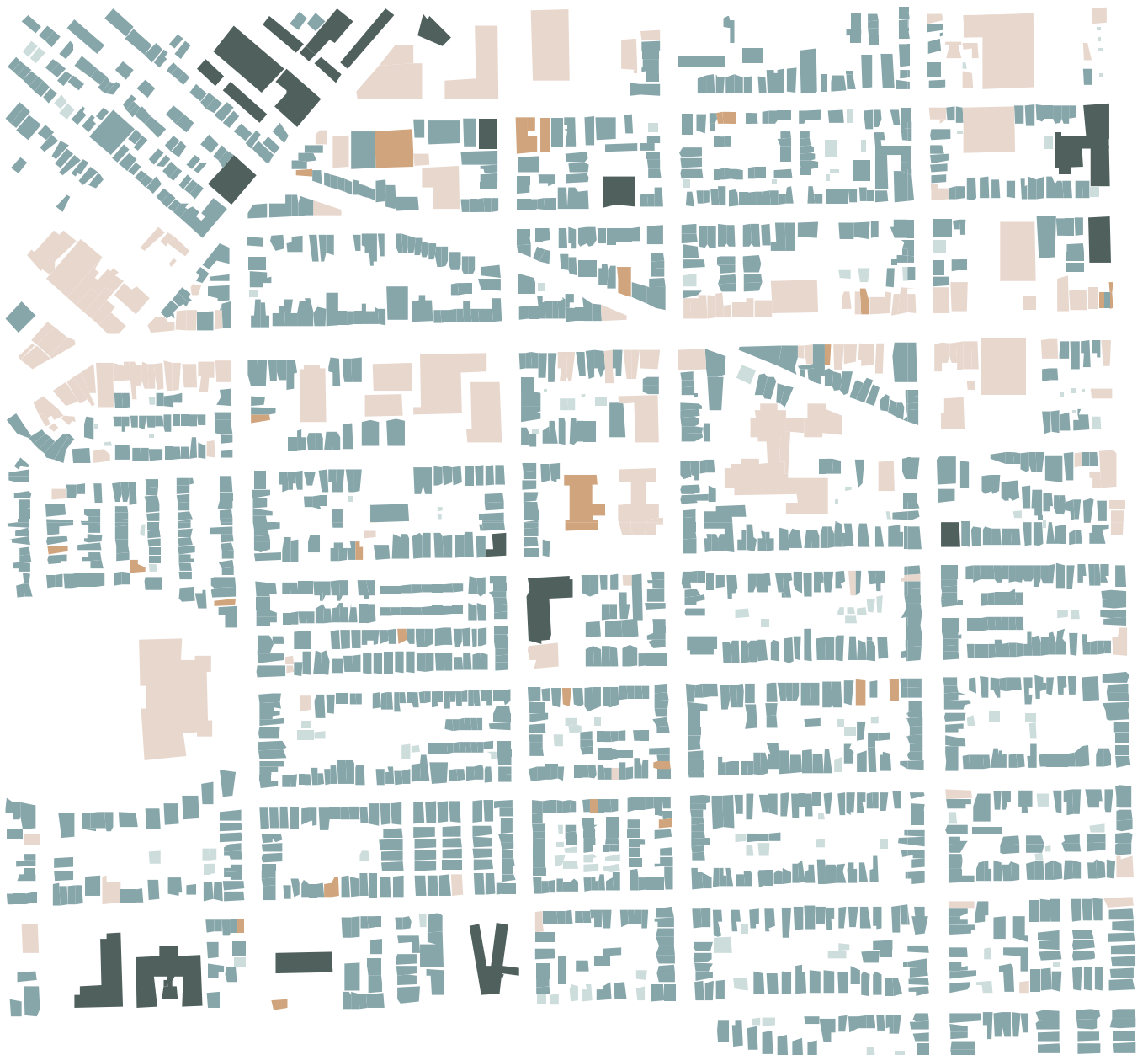


Figure 3.2.15 - Boston Building Typology Map

HOUSING ANALYSIS

Boston, which has a population of 685,000, provides many of the comforts and advantages associated with living in a large metropolis while still maintaining a small-town atmosphere in a variety of districts. The majority of Boston inhabitants rent their homes, giving city dwellers a sense of urban living. Due to the city's long history, Boston is home to many different types of homes. The Greater Boston area has seen residences built since the 1600s or even earlier, and as a result, it has a variety of beautiful architectural styles spread throughout it. There are a variety of styles that include Colonial, Greek Revival, Cape-Style, Mid-Century Modern, and Contemporary. In the Boston area, triple-deckers make up a significant portion of the housing stock. They are also known as three-deckers or 3Ds, and they first appeared in the late 19th century when the local authorities sought a more hygienic and secure manner to accommodate the influx of immigrants, primarily from southern Europe and Ireland.

A triple-decker consists of three stories with typically one unit per floor. Its defining characteristics include a flat roof with windows on all four sides. Another type of housing includes row houses. A row house is often a single-family residence that is situated at the same position on the property line as its adjacent units. They share a common wall, roofline, and normally have a uniform exterior appearance. Row houses often have two or three floors. One or two families often live in row houses, however bigger row houses can be converted into a number of apartments or condominiums. Row houses are the most space-efficient and economical to construct, especially on small lots and in cities with a fast growing population. They are also less expensive to construct than detached apartments due to their lower building costs and land space needs. In the present housing market, row homes also meet a demand since they appeal to people, who aren't necessarily seeking for a conventional apartment or a suburban single-family home. Because these homes are built close together, the neighborhoods can be incredibly compact and intimate. Some of the residential living spaces are surrounded by local businesses, making the neighborhoods walkable.



Figure 3.2.16 - Boston Number of Housing Units



Figure 3.2.17 - Boston Average Number of Inhabitants per Household



Figure 3.2.18 - Boston Average Housing Unit Price

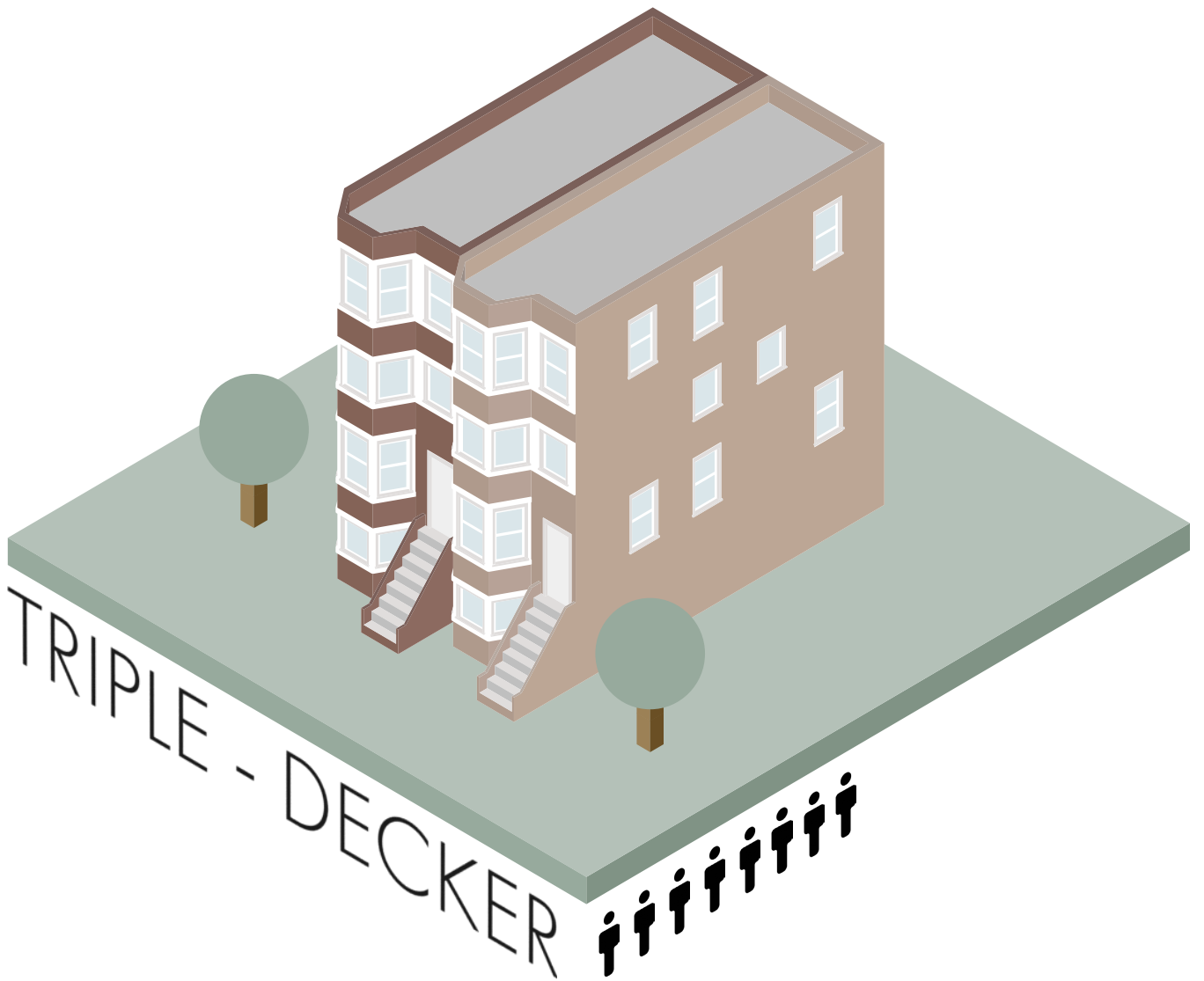


Figure 3.2.19 - Boston Triple-Decker

WARSAW
POLAND



Figure 3.3.1 - Warsaw Map



Figure 3.3.2 - Warsaw Neighbourhood





Figure 3.3.3 - Warsaw Housing



Figure 3.3.4 - Warsaw Housing



Figure 3.3.5 - Warsaw Housing

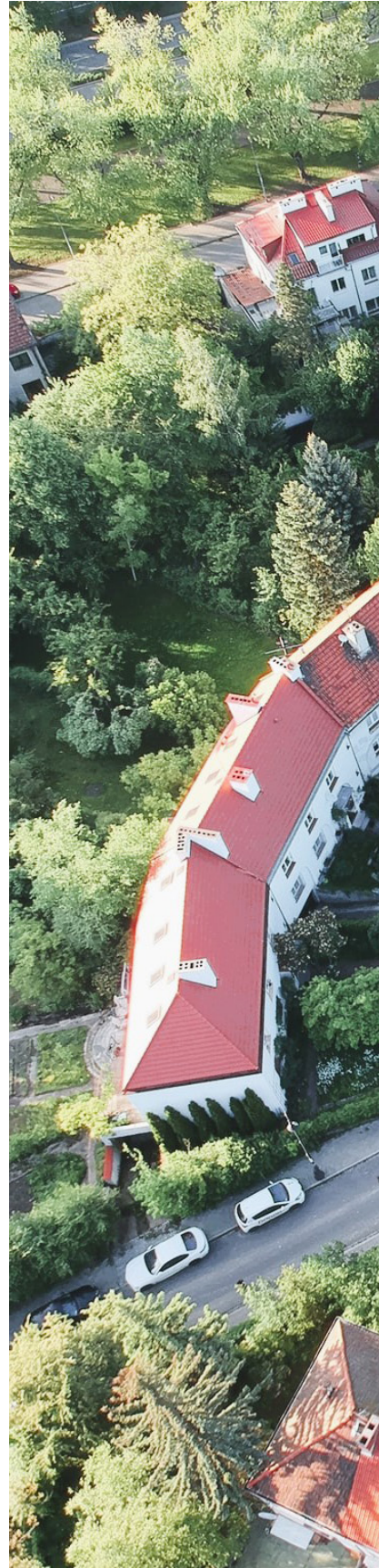


Figure 3.3.6 - Warsaw Housing



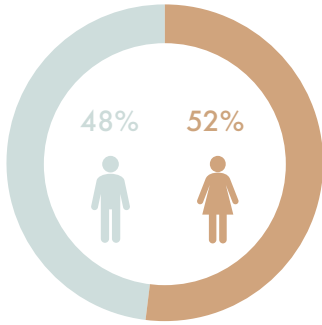


Figure 3.3.7 - Warsaw Gender

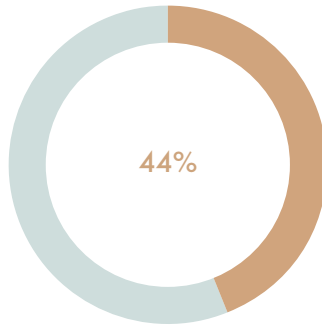
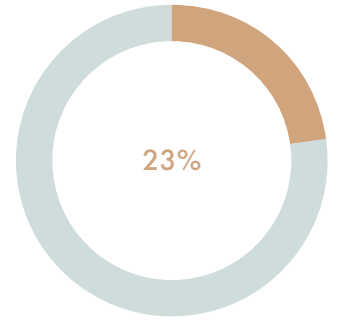


Figure 3.3.8 - Warsaw Higher Education



3.3.9 - Warsaw Poverty Rate

Figure 3.3.10 - Warsaw Median Household Income

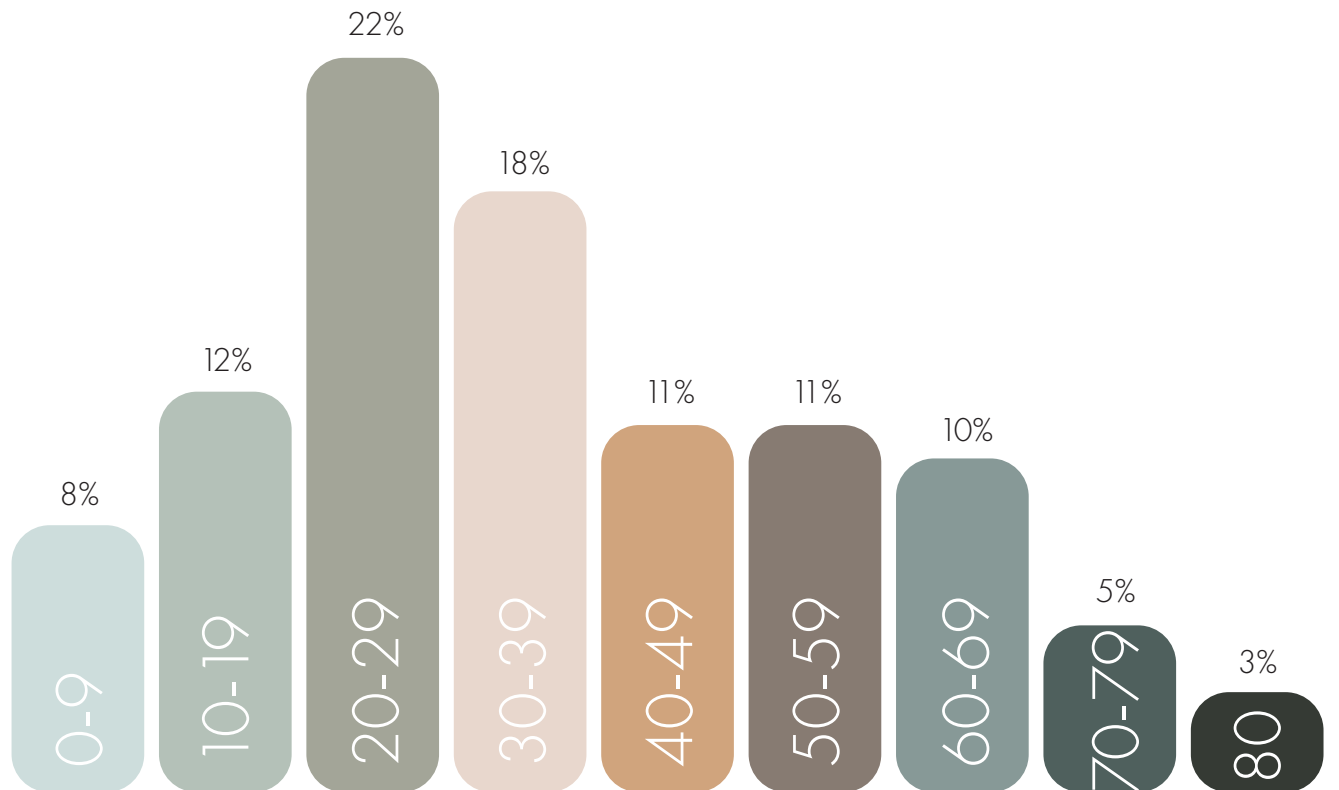
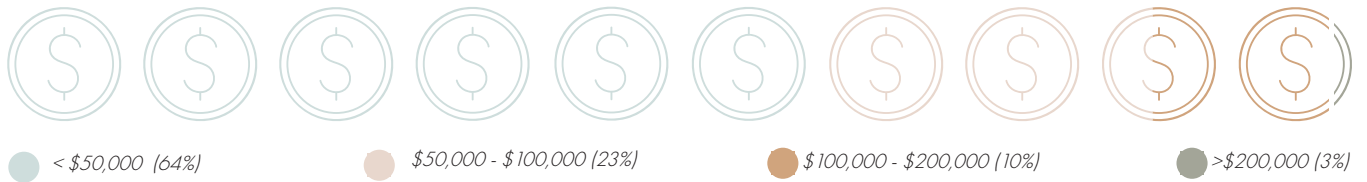


Figure 3.3.11 - Warsaw Age

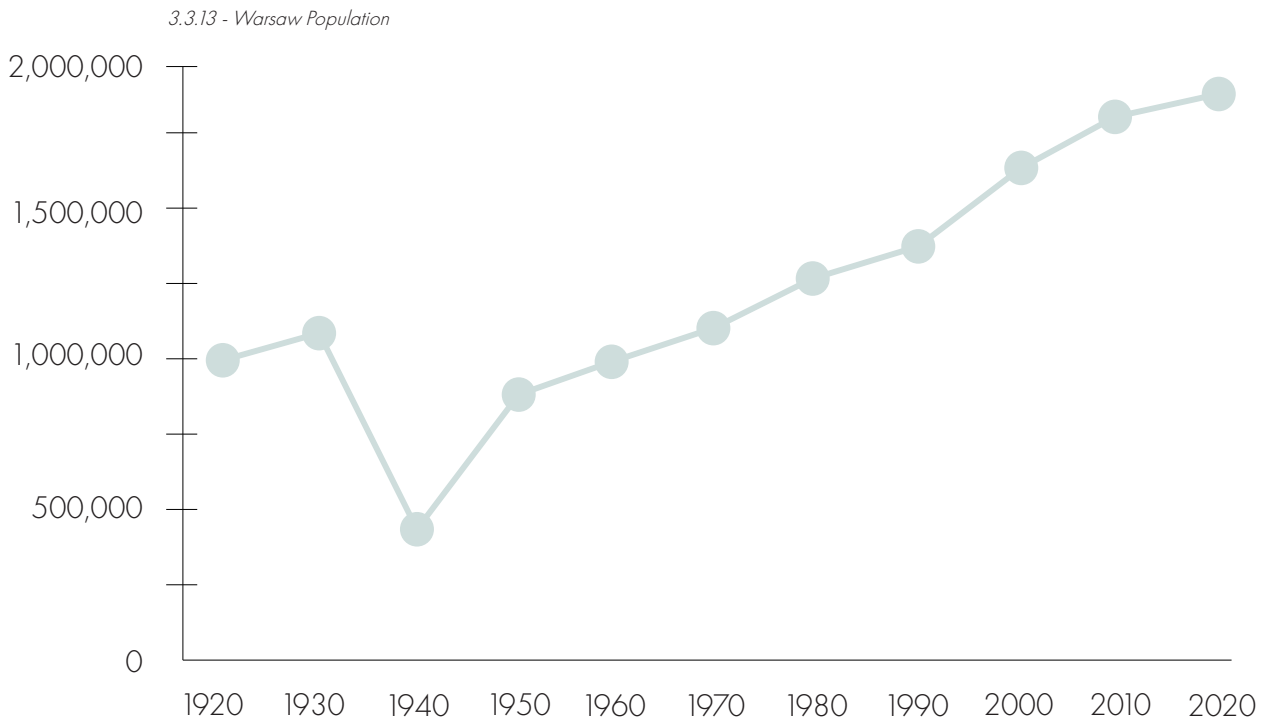
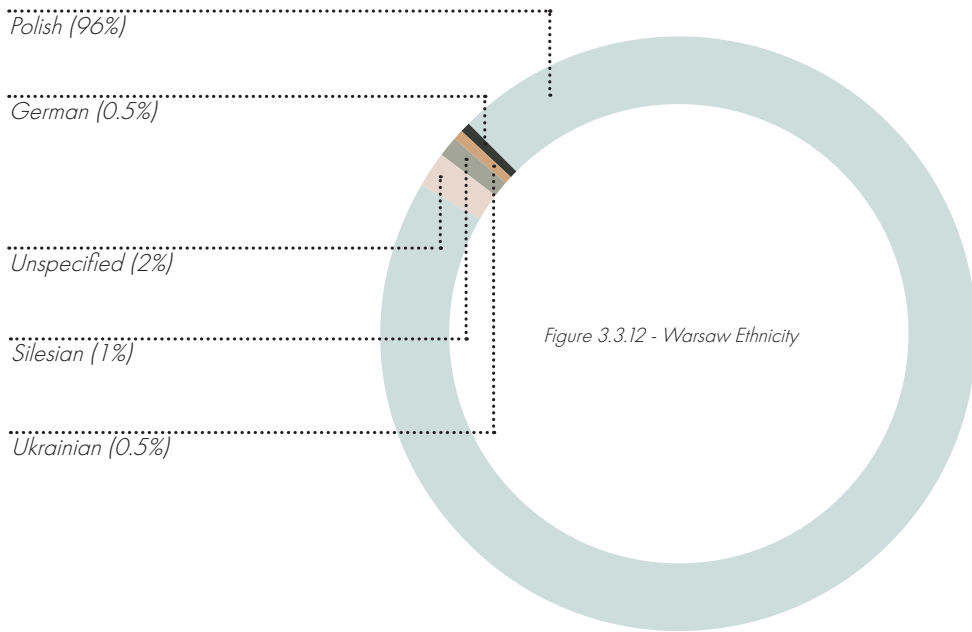


FIGURE GROUND MAPPING

Understanding that the built environment of Warsaw as being diverse in forms. Selecting a specific location for this study, the Żoliborz neighborhood, for an analysis of a Warsaw neighborhood allows for understanding of the city's urban forms. In the figure ground map, you can start to define where the roads are located, as they are adjacent to lines of built forms. The built environment consists of diverse forms that line up against the streets. The forms create opportunities for diverse typologies, green spaces, and different means of travel. This map creates a better understanding of the building sizes and spaces in between and how these forms relate to one another.



Figure 3.3.14 - Warsaw Figure Ground Map

BUILDING TYPOLOGY MAPPING

Developing a building typologies map to grasp an understanding of the type of buildings in the neighborhood. This analysis consisted of utilizing multiple maps and Google Earth to retrieve the data. Going up and down the streets provided an improved understanding of the current conditions that consist of housing types. There is such a vast diverse range of building typologies that range from having apartments with retail on the first floor, to housing, and semi detached houses. This allows for many people and diverse groups of residents that live within the city to live in close proximity to one another. The urban form is designed with and for the people residing here and how they are able to use it.






- SINGLE FAMILY HOUSES 
- MISSING MIDDLE HOUSING 
- APARTMENTS 
- COMMERCIAL 
- ABANDONED STRUCTURE 



Figure 3.3.15 - Warsaw Building Typology Map

HOUSING ANALYSIS

Warsaw is home to various metropolitan neighborhoods that boast of different housing typologies. This diversity provides residents with a wide range of options to choose from when it comes to housing preferences. These typologies include single-family houses, semi-detached houses, and apartment complexes. During World War II, the city was heavily damaged by bombing and other military actions, leading to the destruction of a significant portion of its housing stock. After the war, the city underwent a massive reconstruction effort, with many new buildings constructed to replace those that had been destroyed. The architecture of post-war housing in Warsaw is characterized by a functionalist and socialist realist style, with large blocks of flats dominating the cityscape. Today, housing in Warsaw is a mix of older, pre-war buildings, post-war buildings, and newer developments. The housing market in Warsaw has experienced significant growth in recent years, with a rise in property values and increased demand for both rental and purchase properties.

One of the advantages of having these different housing typologies in close proximity is that they encourage communal interactions among residents. They also provide residents with different levels of privacy and autonomy. For example, residents who prefer a more private lifestyle may opt for single-family houses or semi-detached houses, while those who prefer a more communal lifestyle may choose to live in apartment complexes. The availability of different housing typologies also helps to reduce urban sprawl, which can have negative environmental and social impacts. By having different types of housing in one neighborhood, residents can live closer to their workplaces and other amenities, reducing the need for long commutes and urban expansion. This also encourages a more diverse community, with people of different ages, incomes, and backgrounds living and interacting together. This can help to reduce social isolation and promote a sense of community. By encouraging a mix of housing types, residents are able to live closer to amenities, while promoting a more diverse and sustainable community.

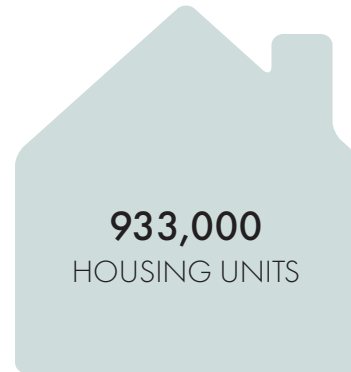


Figure 3.3.16 - Warsaw Number of Housing Units



Figure 3.3.17 - Warsaw Average Number of Inhabitants per Household



Figure 3.3.18 - Warsaw Average Housing Unit Price



Figure 3.3.19 - Warsaw Semi-Detached

COPENHAGEN
DENMARK



Figure 3.4.1 - Copenhagen Map



013 942 Copenhagen Neighborhood





Figure 3.4.3 - Copenhagen Housing



Figure 3.4.4 - Copenhagen Housing



Figure 3.4.5 - Copenhagen Housing



Figure 3.4.6 - Copenhagen Housing



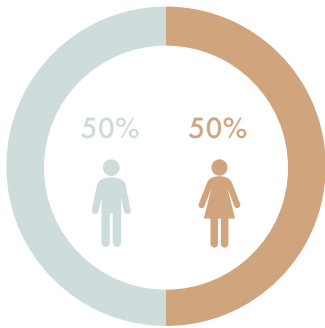


Figure 3.4.7 - Copenhagen Gender

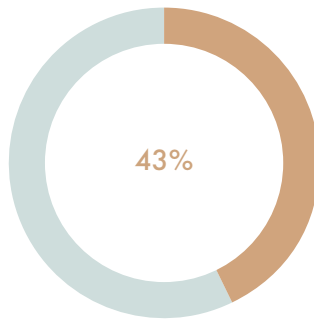


Figure 3.4.8 - Copenhagen Higher Education

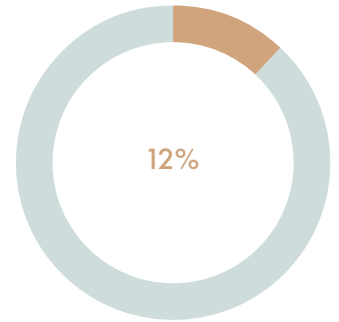


Figure 3.4.9 - Copenhagen Poverty Rate

Figure 3.4.10 - Copenhagen Median Household Income

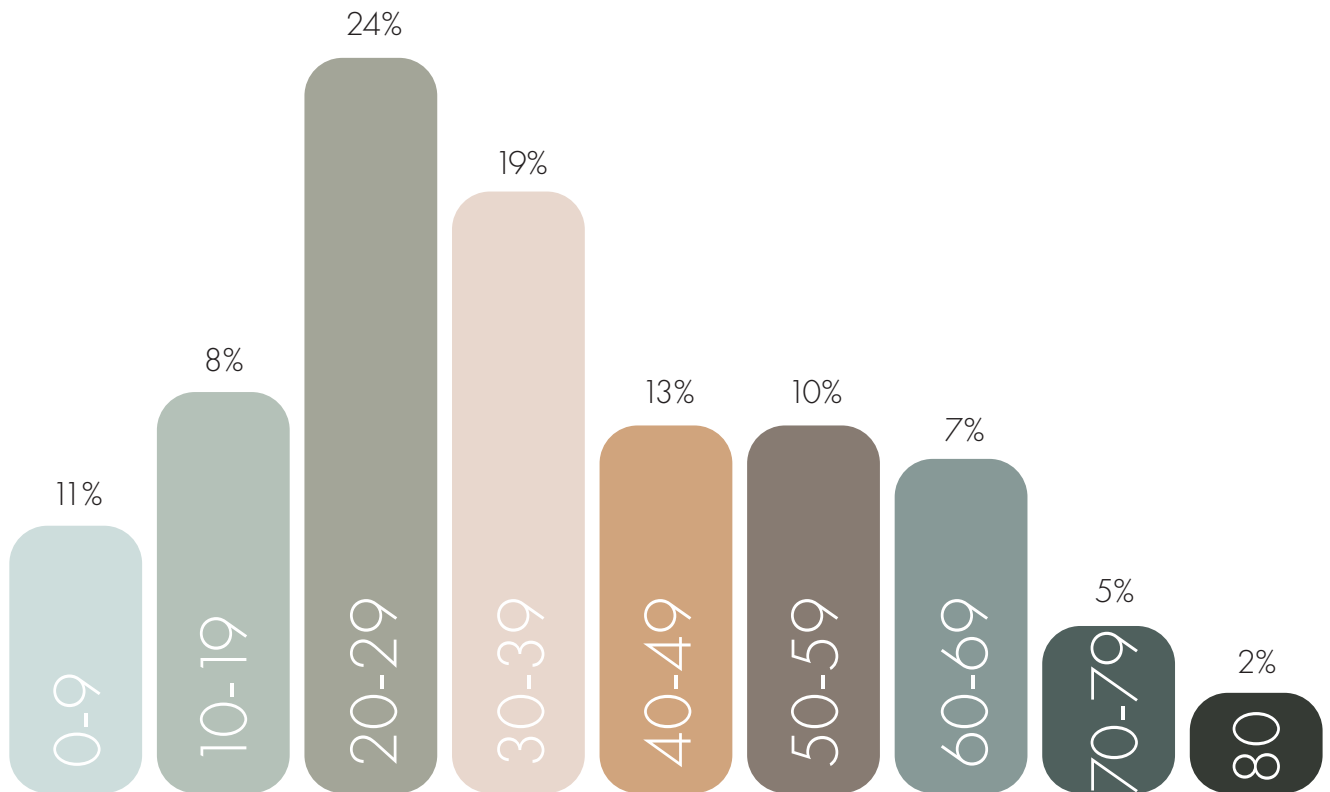
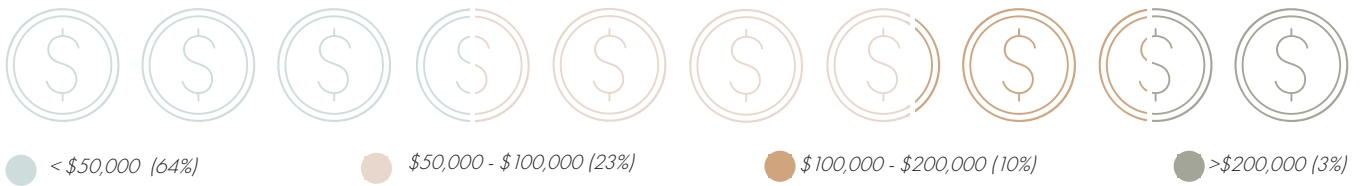


Figure 3.4.11 - Copenhagen Age

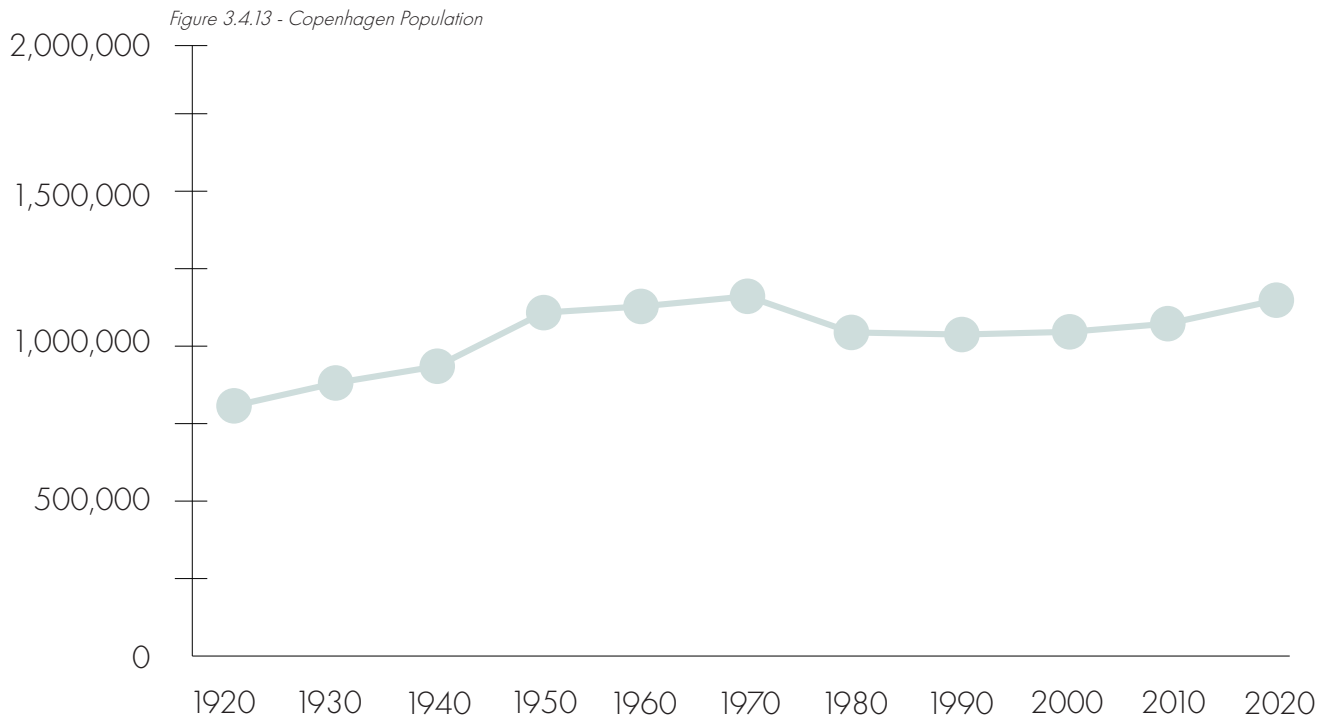
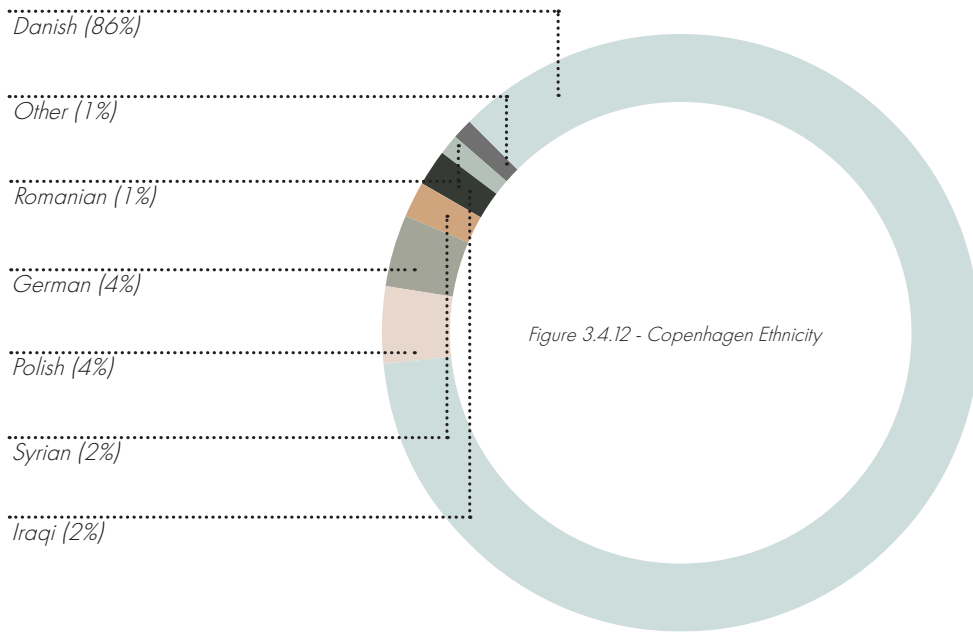


FIGURE GROUND MAPPING

Understanding that the built environment of Copenhagen as being diverse in forms. Selecting a specific location for this study, the Østerbro neighborhood, for an analysis of a Copenhagen neighborhood allows for understanding of the city's urban forms. In the figure ground map, you can define where the roads are located, as they are adjacent to lines of built forms. The built environment consists of similar forms that line up against the streets. This map creates a better understanding of the building sizes and spaces in between and how these forms relate to one another. Through spatial analysis, there is an understanding of these large blocks of apartments, which create these semi super blocks.



Figure 3.4.14 - Copenhagen Figure Ground Map

BUILDING TYPOLOGY MAPPING

Developing a building typologies map to grasp an understanding of the type of buildings in the neighborhood. This analysis consisted of utilizing multiple maps and Google Earth to retrieve the data. Going up and down the streets provided an improved understanding of the current conditions that consist of housing types. The neighborhood typically consists of apartment buildings. Copenhagen contains different types of apartment style housing. The lower levels of these forms are dedicated to retail and commercial use and the top floors are dedicated to residential living. The blocks benefit from allowing the residents to have the opportunity to easily walk and cycle these neighborhoods.






- SINGLE FAMILY HOUSES 
- MISSING MIDDLE HOUSING 
- APARTMENTS 
- COMMERCIAL 
- ABANDONED STRUCTURE 



Figure 3.4.15 - Copenhagen Building Typology Map

HOUSING ANALYSIS

During the 19th century, the Industrial Revolution brought significant changes to housing in Copenhagen. The city experienced a significant increase in population, as people moved from rural areas to work in the factories and industries that emerged during this period. As a result, new forms of housing were constructed, such as apartment buildings, to accommodate the growing population. Many of these apartments were built with small, cramped living spaces, lacking in basic amenities such as indoor plumbing. In the early 20th century, the city government took steps to improve housing conditions for its citizens. In 1912, the Copenhagen Housing Association was established, aimed at building affordable, high-quality housing for working-class families. In the mid-20th century, Copenhagen saw a shift towards modernist architecture, with the construction of many large-scale housing complexes. These complexes were designed to provide affordable, functional housing for families, with large green spaces and communal facilities such as playgrounds and sports fields. In recent years, Copenhagen has continued to prioritize housing as a key issue, with a focus on sustainability and affordability. The city has implemented policies to promote energy-efficient housing and has invested in new housing developments aimed at providing affordable, high-quality housing for a diverse range of residents. This led to Copenhagen having a diverse range of apartment-style housing. The lower floors of these buildings are often used for retail and commercial purposes. The upper floors of these buildings are typically dedicated to residential living. This type of housing arrangement is common throughout the city. One benefit of this design is that residents can easily walk or cycle around the neighborhoods. The blocks in Copenhagen are designed to be pedestrian-friendly. Cycling is a popular mode of transportation for many residents in the city of Copenhagen. The retail and commercial spaces on the lower levels of these buildings are often very convenient for residents. They can easily walk downstairs to buy groceries, grab a coffee, or run errands. This is another benefit of this type of housing arrangement.



Figure 3.4.16 - Copenhagen Number of Housing Units



Figure 3.4.17 - Copenhagen Average Number of Inhabitants per Household

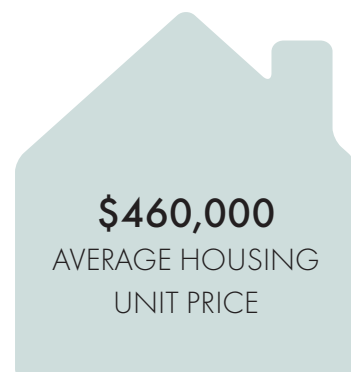


Figure 3.4.18 - Copenhagen Average Housing Unit Price

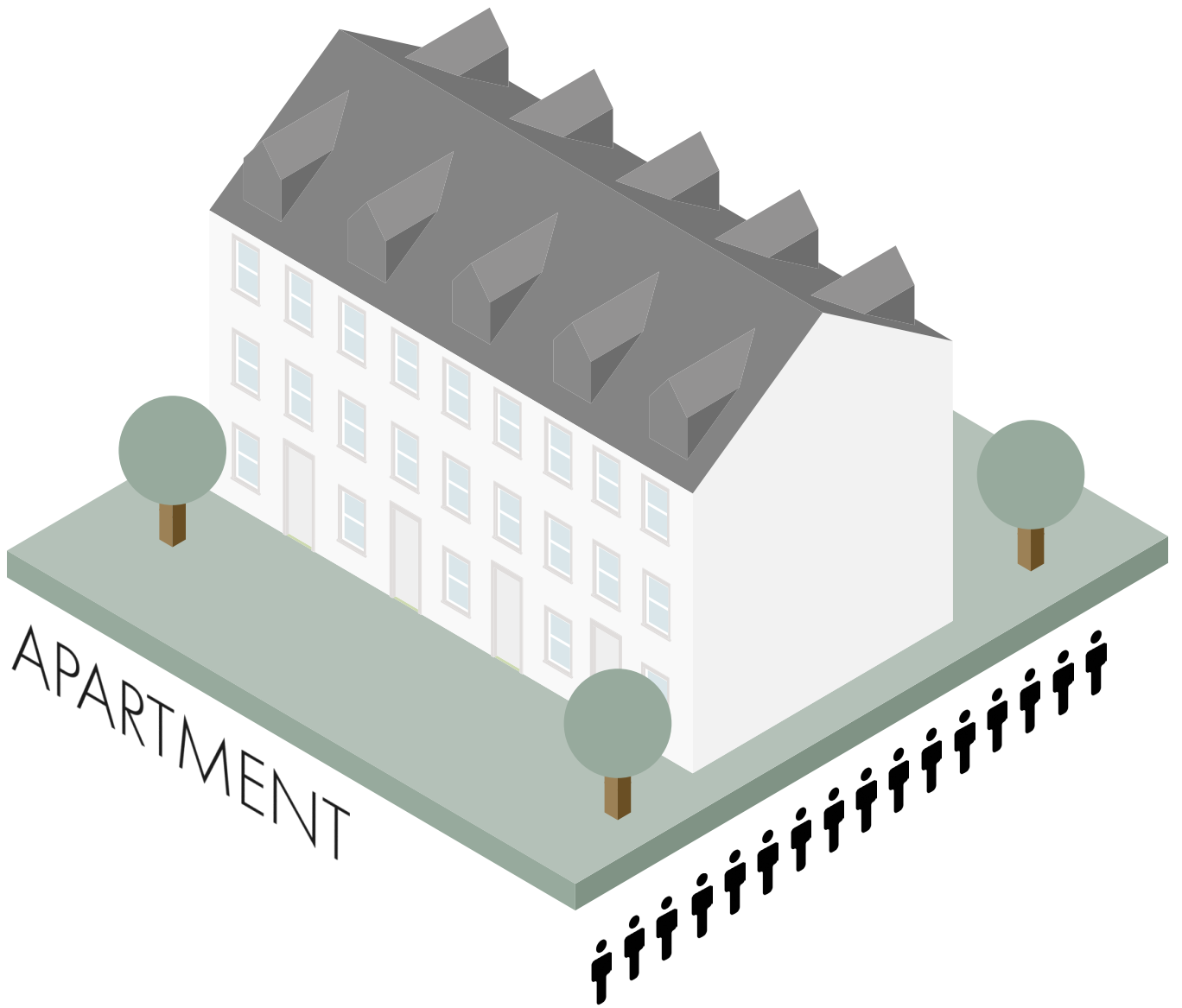


Figure 3.4.19 - Copenhagen Apartment

FLORENCE

ITALY



Figure 3.5.1 - Florence Map



Figure 3.5.2 - Florence Neighborhood





Figure 3.5.3 - Florence Housing



Figure 3.5.4 - Florence Housing



Figure 3.5.5 - Florence Housing



Figure 3.5.6 - Florence Housing



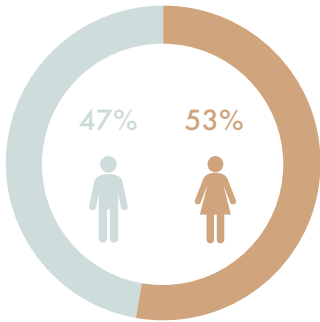


Figure 3.5.7 - Florence Gender

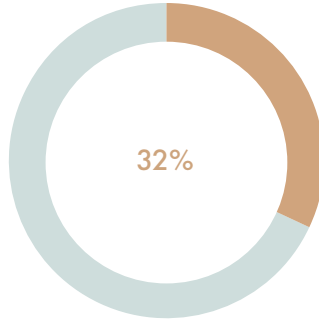


Figure 3.5.8 - Florence Higher Education

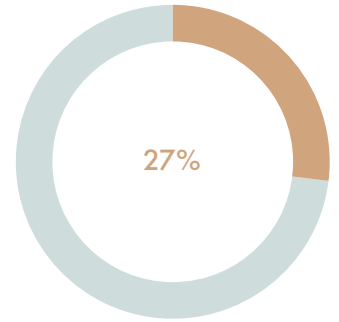


Figure 3.5.9 - Florence Poverty Rate

Figure 3.5.10 - Florence Median Household Income

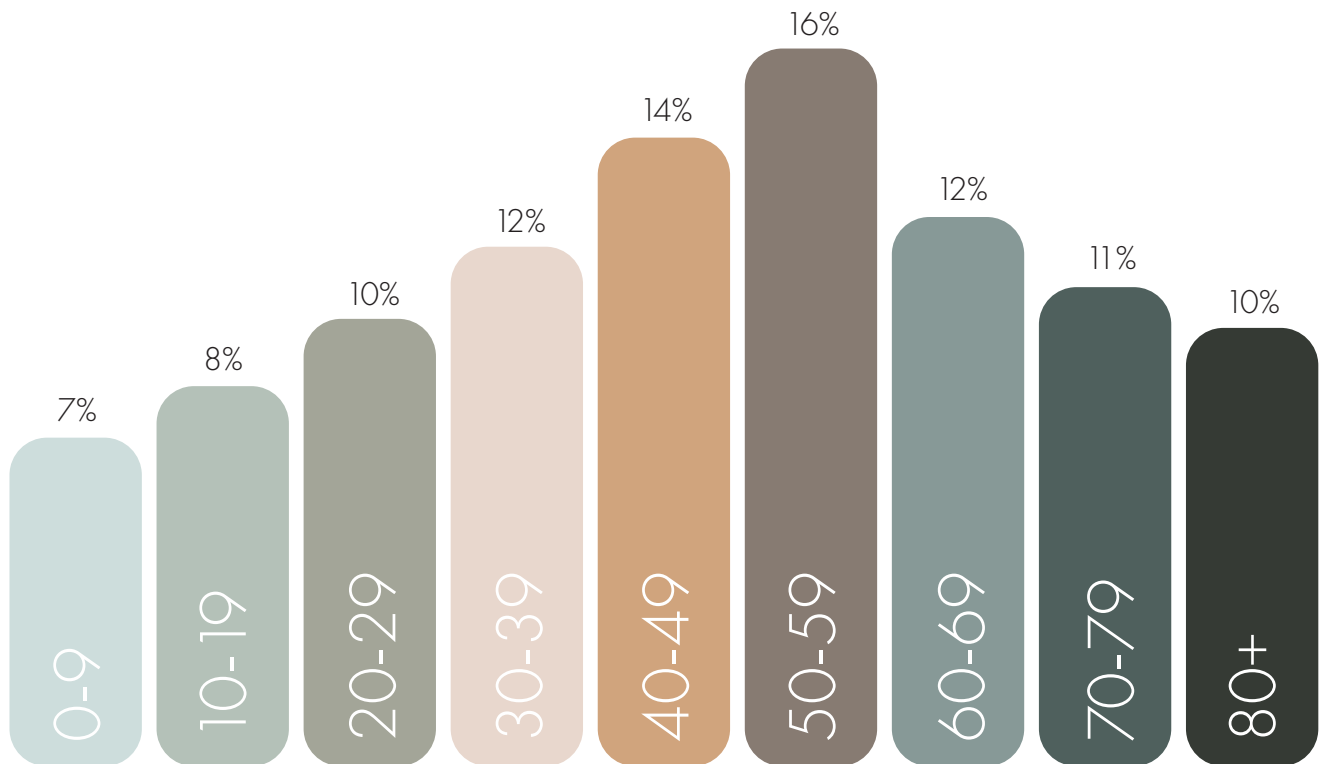
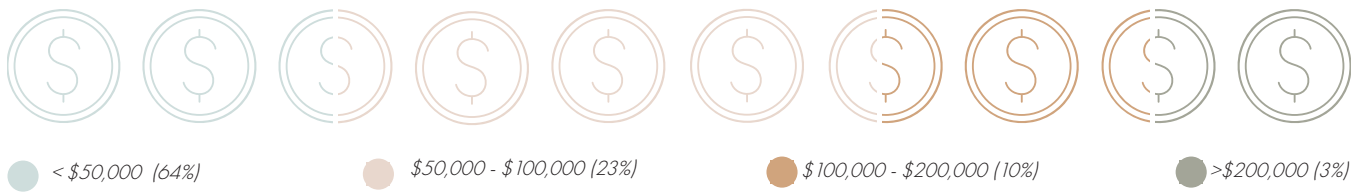


Figure 3.5.11 - Florence Age

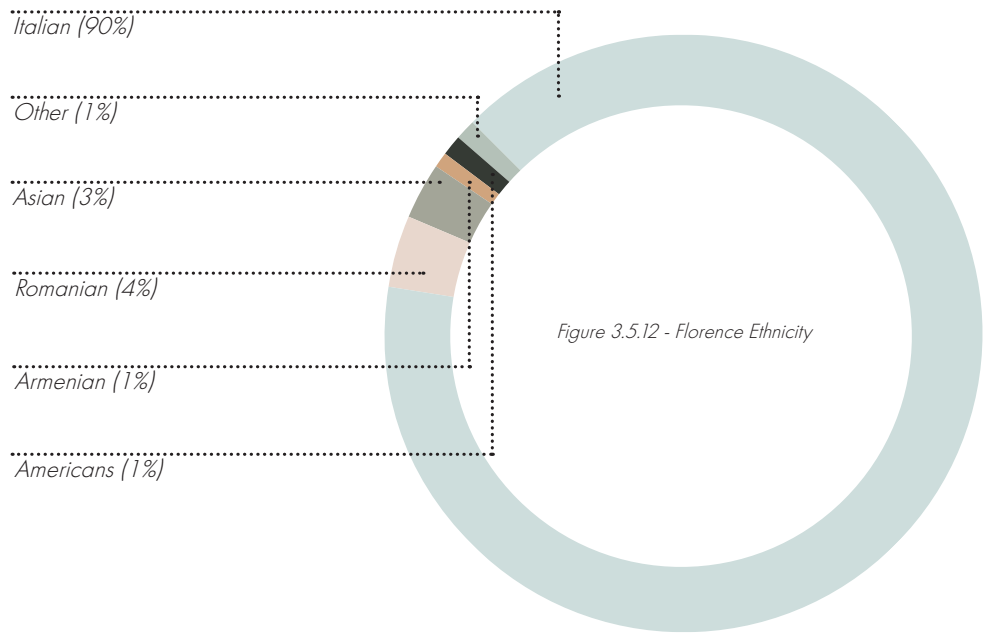


Figure 3.5.12 - Florence Ethnicity

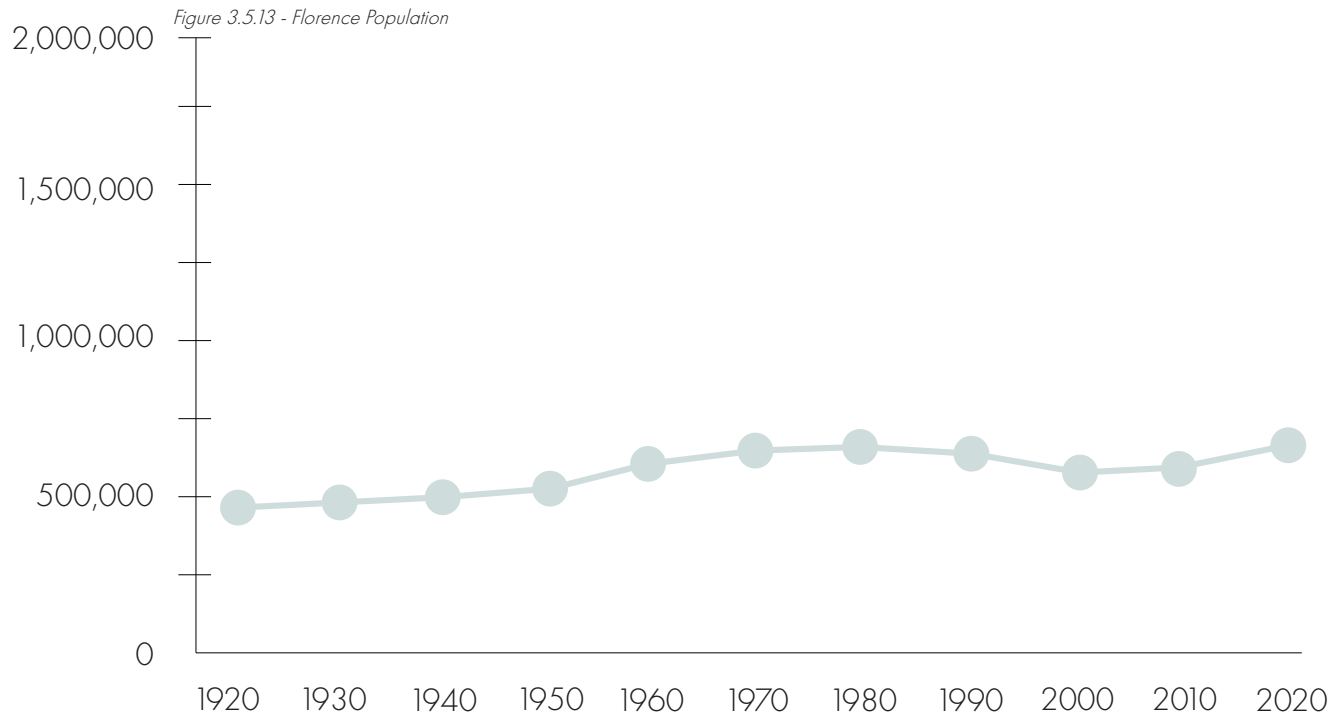


Figure 3.5.13 - Florence Population

FIGURE GROUND MAPPING

Understanding that the built environment of Florence as being dense in forms. Selecting a specific location for this study, the Santa Croce neighborhood, for an analysis of a Florence neighborhood allows for understanding of the city's urban forms. In the figure ground map, you can define where the roads are located, as they are found as the white in between the built forms. The built environment consists of the same form that line the narrow streets. This map creates a better understanding of the building sizes and spaces in between and how these forms relate to one another. Through spatial analysis, there is an understanding of these large blocks of apartments, creating super blocks.



Figure 3.5.14 - Florence Figure Ground Map

FIGURE GROUND MAPPING

Developing a building typologies map to grasp an understanding of the type of buildings in the neighborhood. This analysis consisted of utilizing multiple maps and Google Earth to retrieve the data. Going up and down the streets provided an improved understanding of the current conditions that consist of housing types. The neighborhood consists of only apartment buildings. Florence contains different types of apartment style housing. The lower levels of these forms are dedicated to retail and commercial use and the top floors are dedicated to residential living. The blocks benefit from allowing the residents to have the opportunity to easily walk and cycle these neighborhoods.






- SINGLE FAMILY HOUSES 
- MISSING MIDDLE HOUSING 
- APARTMENTS 
- COMMERCIAL 
- ABANDONED STRUCTURE 



Figure 3.5.15 - Florence Building Typology Map

HOUSING ANALYSIS

Florence's density is evidence of its strong culture and extensive history. The history of apartment buildings in Florence, Italy is extensive and goes back to the Middle Ages. These structures were built to accommodate the city's rapidly growing population as a result of trade and commerce. Apartment structures in the Middle Ages were primarily made of stone and had several stories. The higher levels were used for residential reasons, while the lower levels were used for businesses like shops and workshops. Residents have a variety of living alternatives that meet their requirements and tastes because of the many apartment dwelling styles. The city's urban shape has been preserved because to the absence of cars as the principal mode of transit, with a focus on pedestrian-friendly streets and walkable districts. In addition to being a practical mode of transportation, walking allows you to experience the city's own personality and charm. Both locals and visitors can stroll around the city's busy streets, delve into its secret courtyards and alleyways, and learn more about its fascinating past. The dense population of the city has also sparked the creation of creative housing alternatives. Developers are always coming up with innovative ideas to suit the strong demand for housing in the city, from micro-apartments to co-living spaces. The city's population density has also contributed to the diversity and depth of its culture. The social fabric of the city has also benefited from the residential density. Because there are so many people living close to one another, this thriving metropolitan environment is marked by a strong sense of community and social interaction. Density and compactness have retained the city's defining characteristics of its urban form despite these changes. With over 10,800 inhabitants per square mile, the city has a high population density that reflects this density. Florence's dense urban shape reflects its extensive history, constrained physical area, and significant cultural and economic significance. This also adds to the city's distinctive personality and livability, making it one of the liveliest and most alluring cities in Italy.

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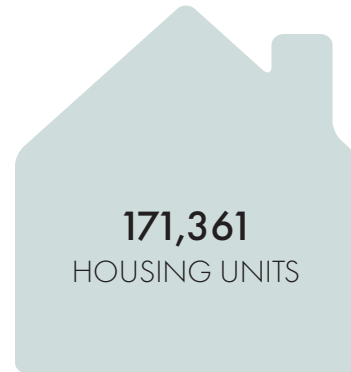


Figure 3.5.16 - Florence Number of Housing Units



Figure 3.5.17- Florence Average Number of Inhabitants per Household

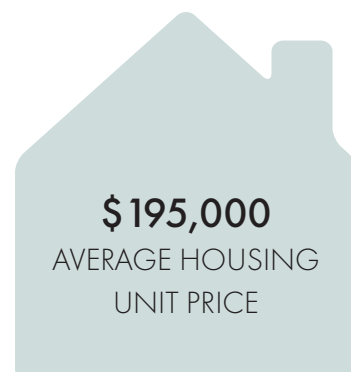


Figure 3.5.18 - Florence Average Housing Unit Price



Figure 3.5.19 - Florence Apartment

3.6 CITY ANALYSIS TAKEAWAYS

Analyzing and studying the urban form of other cities is crucial in gaining knowledge for future innovation. By looking at how various cities have addressed urban planning, design, and development, designers can find inspiration and create best practices for their own cities. It also offers a chance to absorb lessons from other cities' strengths and failures, which can inform decision-making and policy development in their own city. Learning about the urban forms of other cities can broaden designers' perspectives and challenge what is desirable in urban architecture. The urban form of a city is not just about the physical layout, but also the social, cultural, and economic variables that shape it. By examining a variety of urban forms found around the world, designers can better understand the connection between the built environment and these variables.

In the case of the Core City neighborhood in Detroit, these city analyses can serve as a base for an urban master plan. By studying successful examples of urban planning and design in other cities, designers can develop a plan that is tailored to the unique characteristics of Core City. They can incorporate best practices from other cities while also taking into account the specific social, cultural, and economic context of the neighborhood.

Ultimately, the goal of analyzing and studying the urban form of other cities is to create better cities for all. By learning from the successes and failures of other cities, designers can develop innovative solutions that improve the quality of life for residents, promote sustainability, and enhance the overall livability of the urban environment.

04

4.1 ANALYSIS IMPLICATION

SITE SELECTION

The interest of this study is to revitalize the urban environment of Core City, a Detroit neighborhood, to include an exploration of housing from other cities' urban design principles. Detroit consists of a vast number of single family houses and is lacking "Missing Middle" housing types throughout the city. Implementing a strategy, *Form Framing Place*, is aimed to create an urban master plan in the Core City neighborhood in Detroit. This strategy will provide a framework for city planners and designers to aim to bring back residents into the city through implementing new housing forms, such as duplexes, multiplexes, and row houses. Studying the urban fabric of other cities' will allow for implementation of these principles to the context of Detroit.

SITE LOCATION

Core City is a historic neighborhood in Detroit, Michigan that has undergone significant changes in recent years. The neighborhood is located north of Corktown and west of Midtown, making it a prime location for intervention in Detroit. Its proximity to these two thriving neighborhoods creates a hub for residents and visitors to easily access the city's downtown area off Grand River Avenue.

One of the main advantages of the location is the opportunity it presents for intersection and social interaction. The corner of Grand River and Martin Luther King has been selected as the location for implementing framework strategies, creating a centralized point for residents of Core City, the Woodbridge neighborhood, and surrounding areas to come together. This location serves as a gathering place, allowing for residents to interact with one another and develop a sense of community.

Furthermore, the intersection of Grand River and Martin Luther King offers a unique opportunity for urban renewal and redevelopment. Implementing framework strategies in this location could potentially improve the economic viability of the neighborhood and attract new residents and businesses to the area. This, in turn, could stimulate further development and revitalization of the community.

Core City's location and its relationship to its surroundings make it a great opportunity location for intervention and redevelopment. The corner of Grand River and Martin Luther King is a crucial location for implementing framework strategies that aim to foster social interaction, economic growth, and community development.

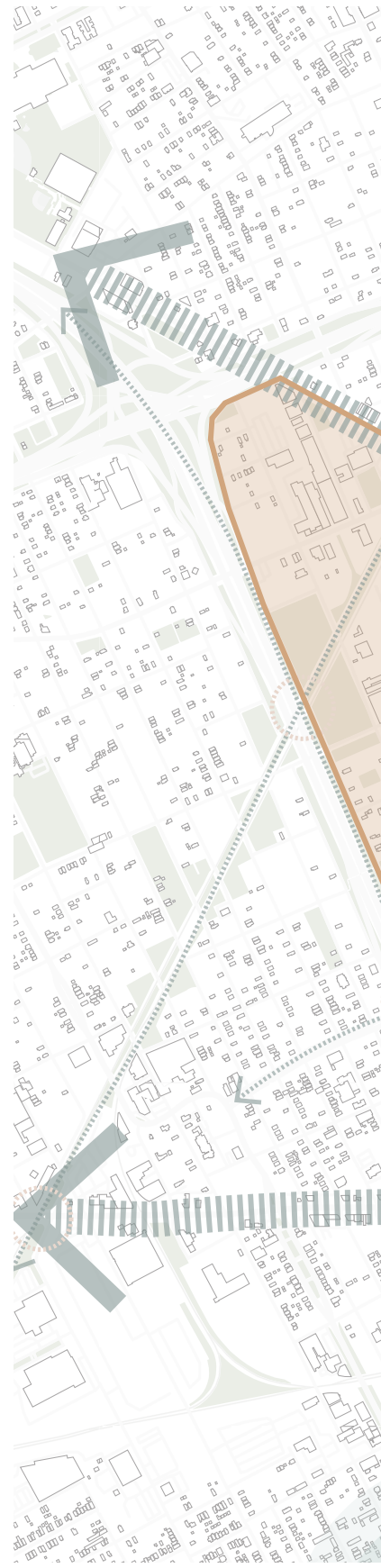
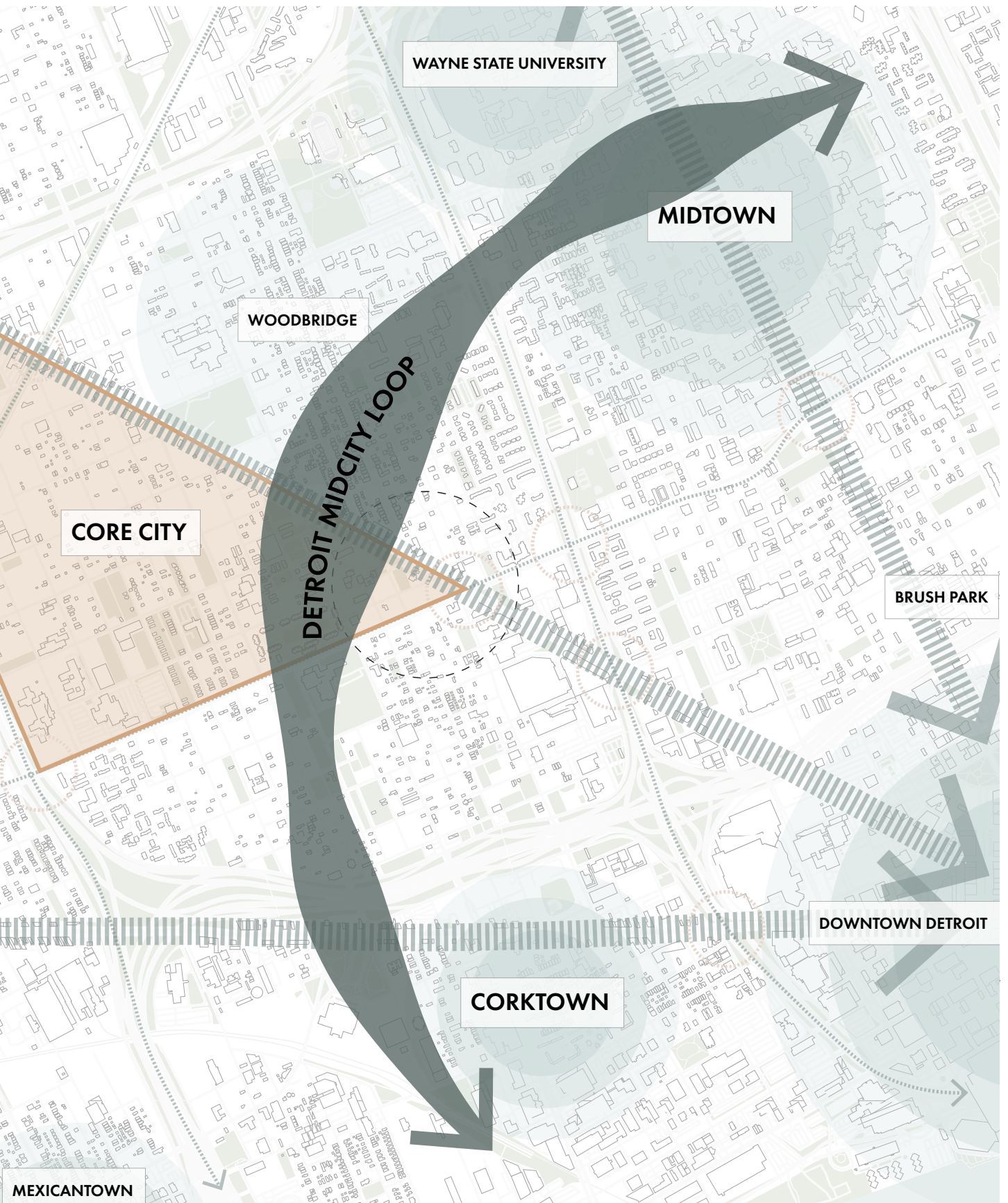


Figure 4.1.1 - Detroit Mid-City Loop Map



WAYNE STATE UNIVERSITY

MIDTOWN

WOODBRIDGE

CORE CITY

DETROIT MIDCITY LOOP

BRUSH PARK

DOWNTOWN DETROIT

CORKTOWN

MEXICANTOWN

4.2 CORE CITY HISTORY

HISTORIC URBAN ENVIRONMENT CHANGES

In 1931, Core City was a thriving and densely populated neighborhood with a diverse range of urban forms. Core City consisted of diverse programming including residential, commercial, and industrial. The neighborhood featured a range of housing types, which attracted a diverse mix of residents. The urban form of Core City also varied, with streets lined with a commercial corridor, as well as small, intimate storefronts. The neighborhood also featured numerous parks and green spaces, providing residents with places to gather, relax, and play. The neighborhood has undergone significant changes since the 1967 riots, which caused significant damage to the neighborhood's buildings and infrastructure. In the years following the riots, many residents and businesses left the area, leading to a decline in population and economic activity in the neighborhood.

Today, Core City consists of many vacant lots and lack of urban forms. By implementing concepts and frameworks from the selected cities, including Boston, Massachusetts; Warsaw, Poland; Copenhagen, Denmark; and Florence, Italy previously studied, will allow for a new growth within the neighborhood. This provides opportunity for revitalization and designing for the future of Core City, while connecting back to the neighborhood's rooted history of being active, diverse, and versatile.



Figure 4.2.1 - Core City 1931



Figure 4.2.2 - Core City 2023

CORE CITY THROUGH TIME

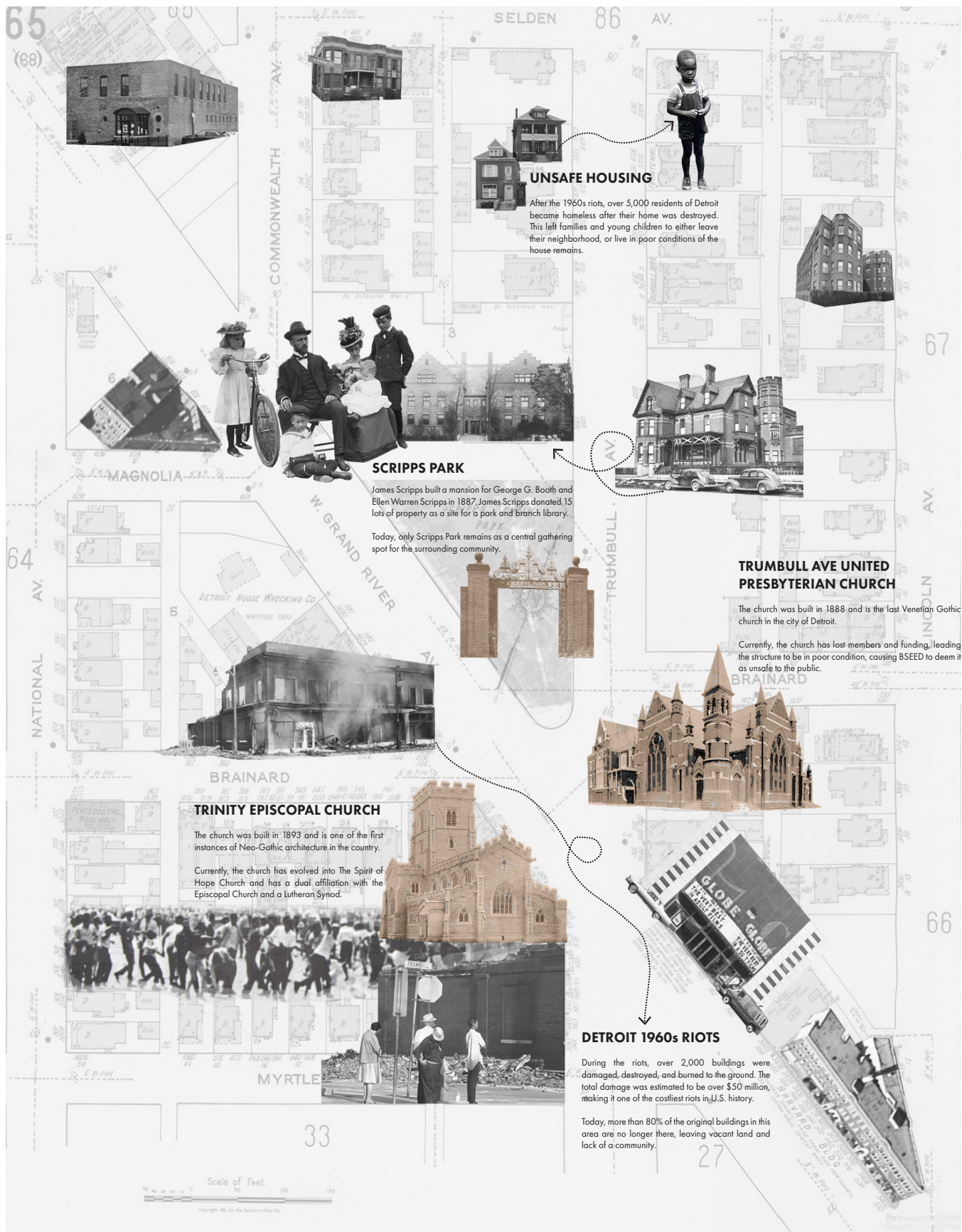


Figure 4.2.3 - Core City History Collage

BUILDINGS DESTROYED SINCE THE 1967 RIOTS

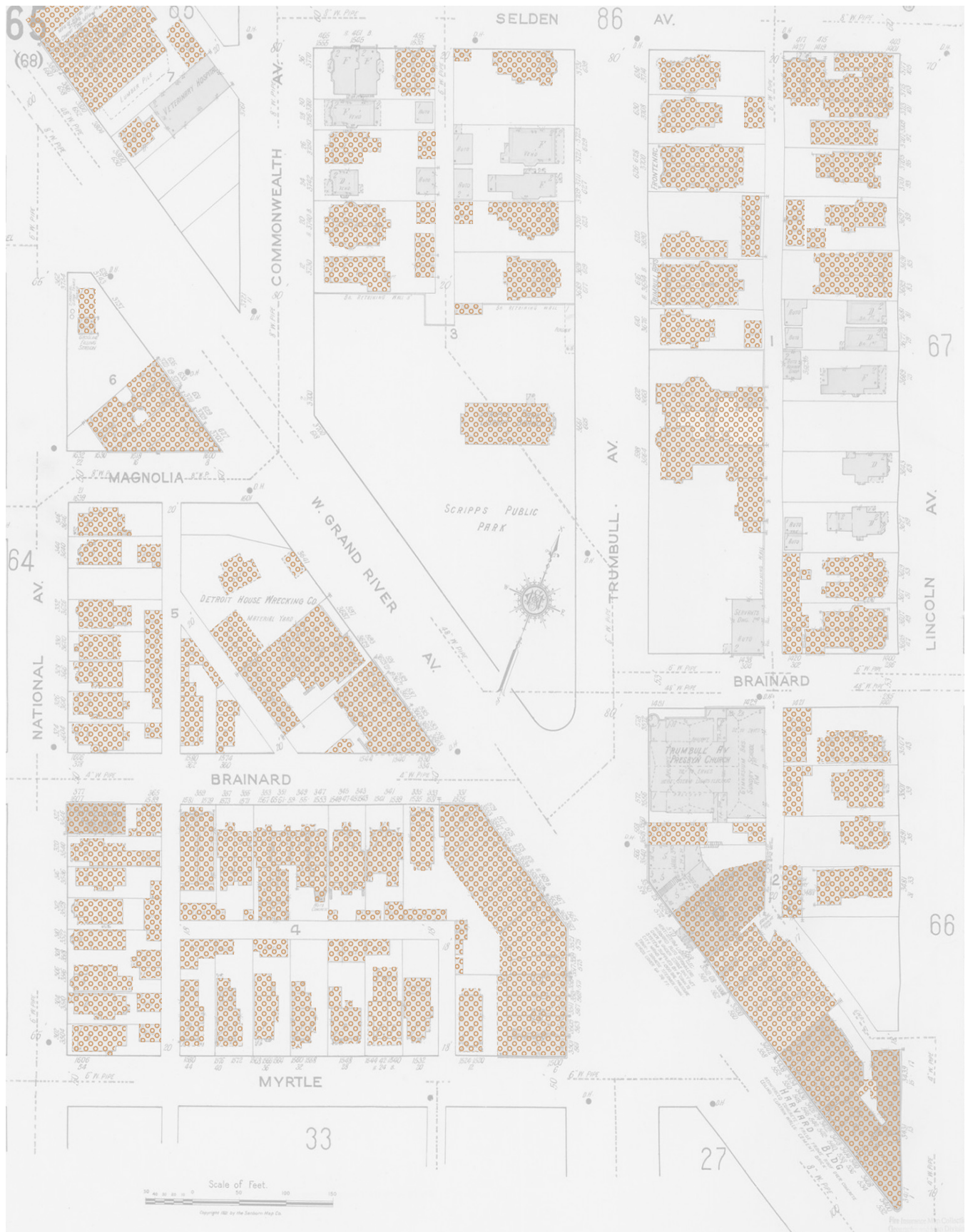


Figure 4.2.4 - Core City Buildings Destroyed



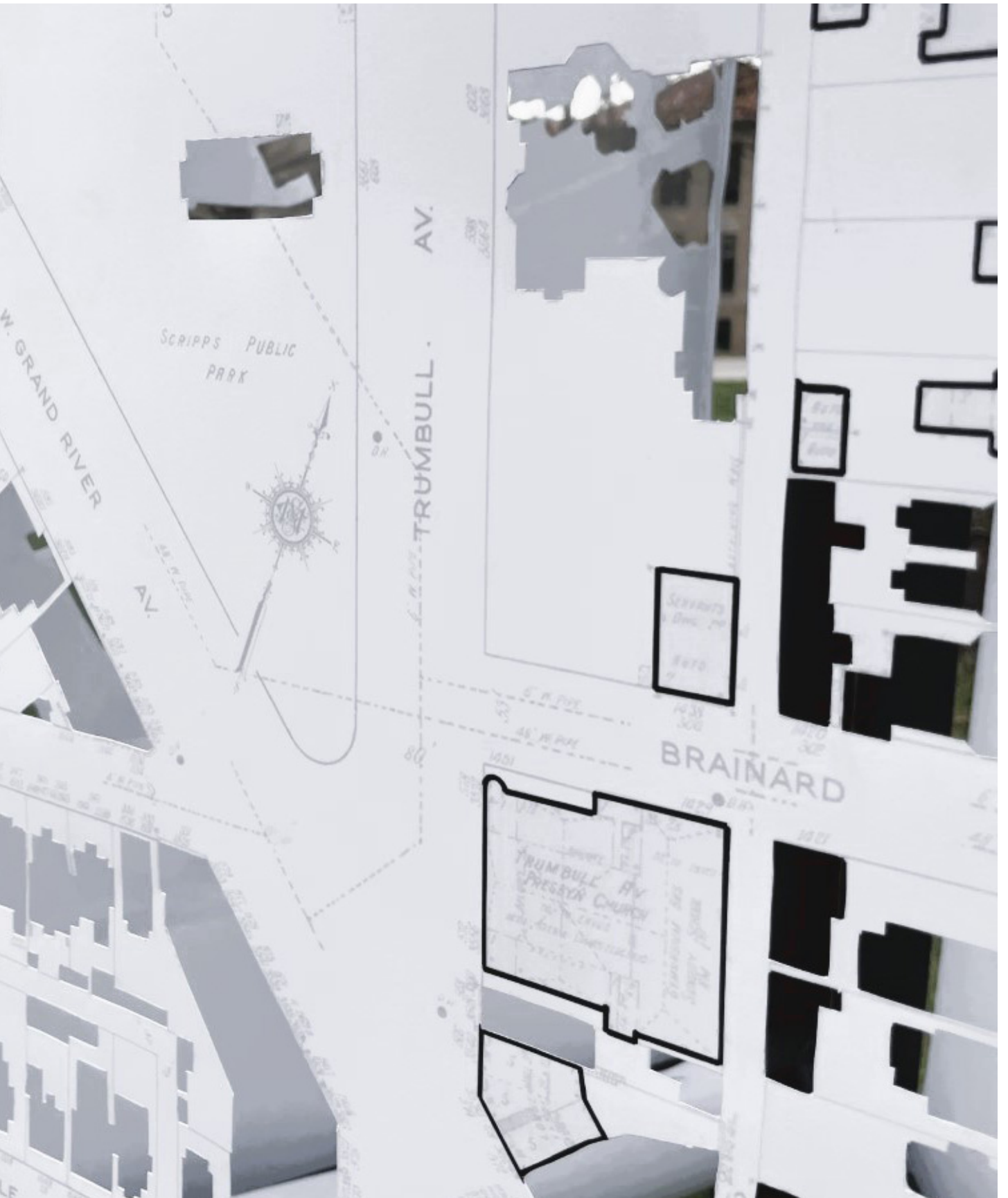
Figure 4.2.5 - Physical Installation of Core City History



Figure 4.2.6 - Physical Installation of Core City History



Figure 4.2.7 - Physical Installation of Core City History



4.3 SITE ANALYSIS

FIGURE GROUND MAPPING

Understanding that the built environment of Core City as being less dense. Core City allows for understanding of the city's urban forms. In the figure ground map, you can start to define where the densely populated surrounding neighborhood of Woodbridge is visible, by seeing similar urban forms of single family houses. This map creates a better understanding of the building sizes and spaces in between and how these forms relate to one another. Through spatial analysis, there is an understanding of the lack of diverse forms that work together spatially.

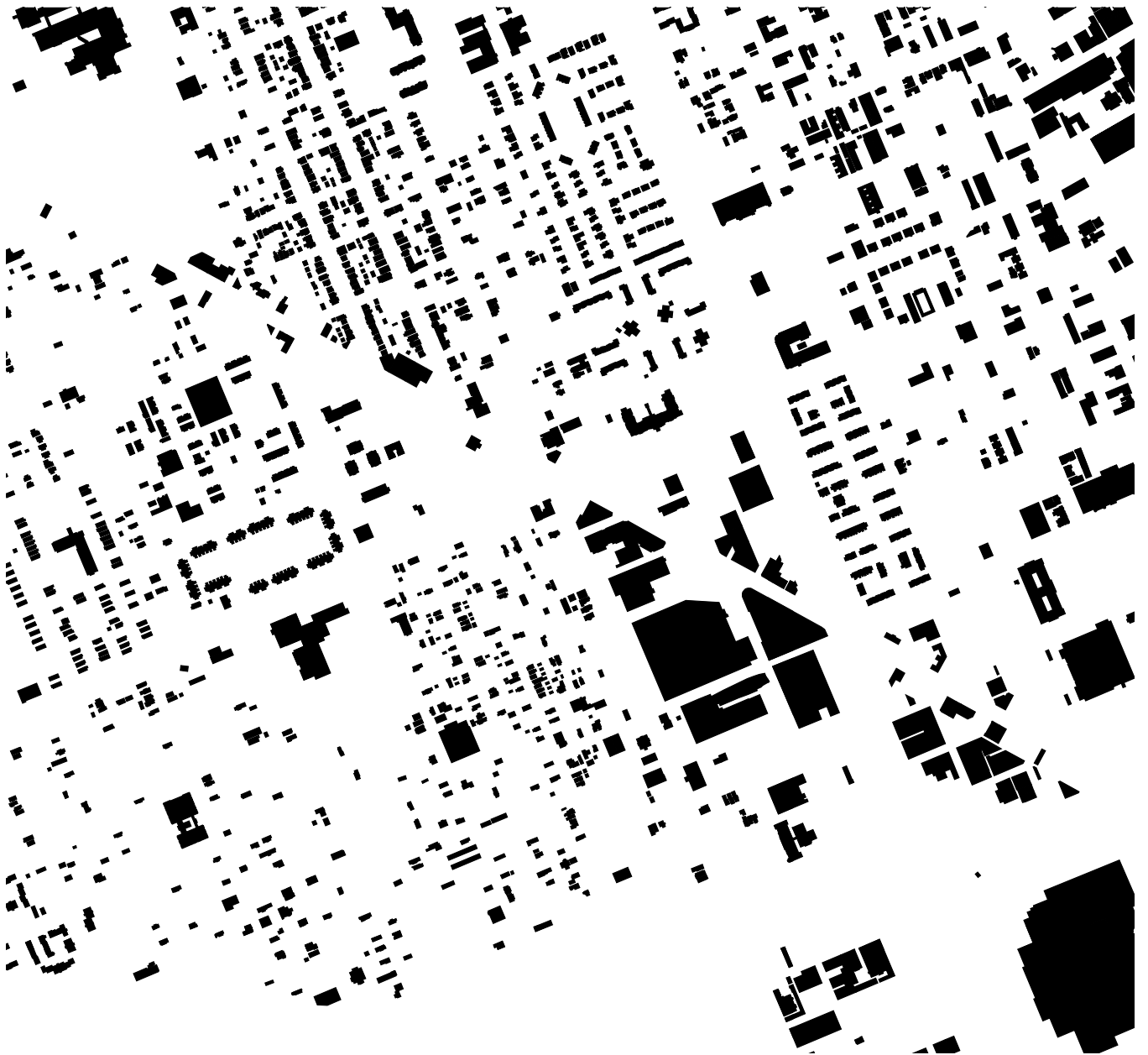


Figure 4.3.1 - Core City Figure Ground Map

BUILDING TYPOLOGY MAPPING

Developing a building typologies map to grasp an understanding of the type of buildings in the neighborhood. This analysis consisted of utilizing multiple maps and Google Earth to retrieve the data. Going up and down the streets provided an improved understanding of the current conditions that consist of housing types. The neighborhood consists of mostly single family houses, with some vacant commercial corridors. Core City contains a vast amount of vacant property with no defined programming. This arises an opportunity for developing a successful and resilient neighborhood master plan that implements these lacking elements.






- SINGLE FAMILY HOUSES 
- MISSING MIDDLE HOUSING 
- APARTMENTS 
- COMMERCIAL 
- ABANDONED STRUCTURE 



Figure 4.3.2 - Core City Building Typology Map

PUBLIC SPACES

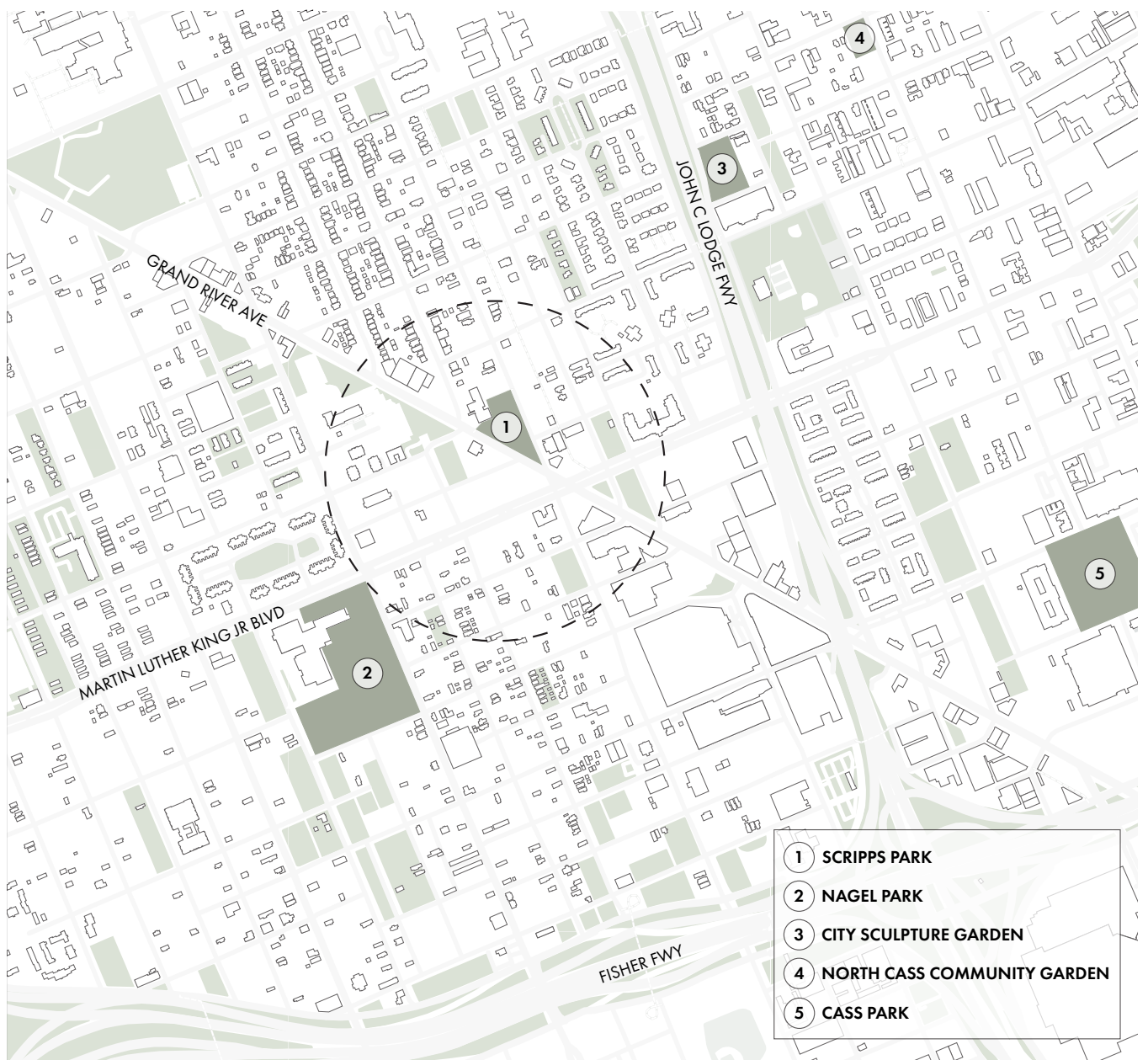


Figure 4.3.3 - Core City Public Spaces Map

CIRCULATION



Figure 4.3.4 - Core City Circulation Map

VISUAL



Figure 4.3.5 - Core City Photograph

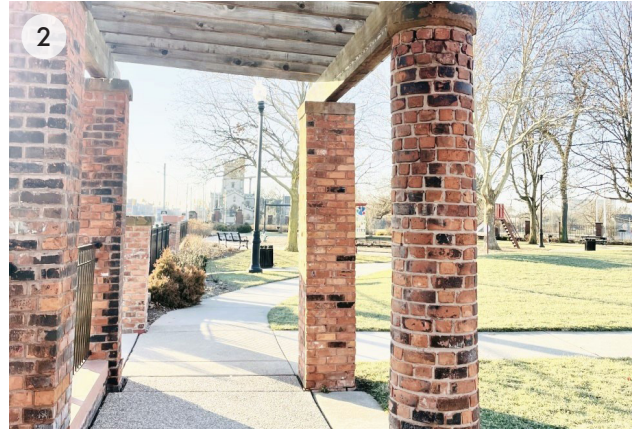


Figure 4.3.6 - Core City Photograph



Figure 4.3.7 - Core City Photograph



Figure 4.3.8 - Core City Photograph



Figure 4.3.9 - Core City Photograph



Figure 4.3.10 - Core City Photograph

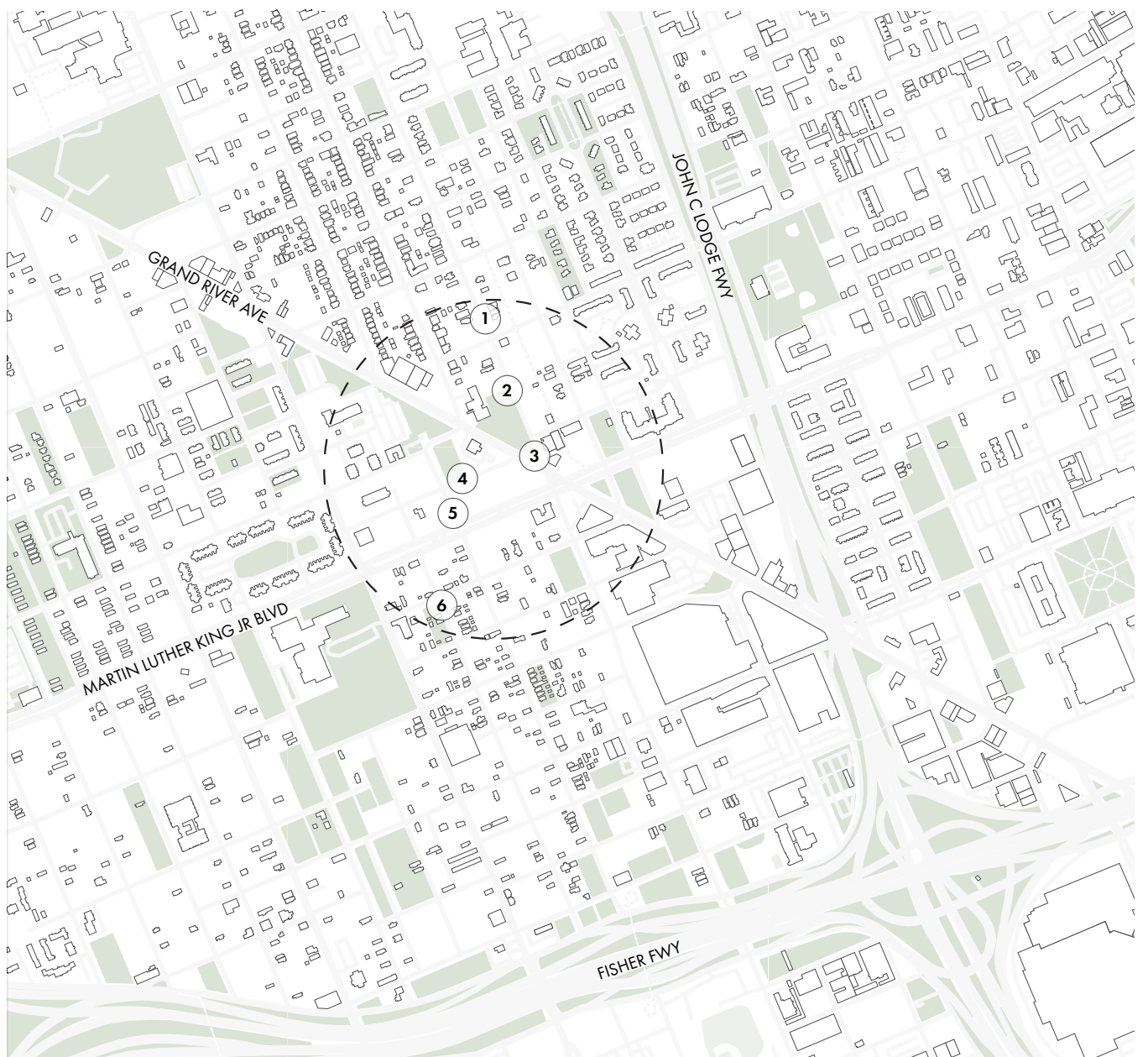


Figure 4.3.11 - Core City Photographs Map

MAPPING OVERLAY | BOSTON OVERLAY

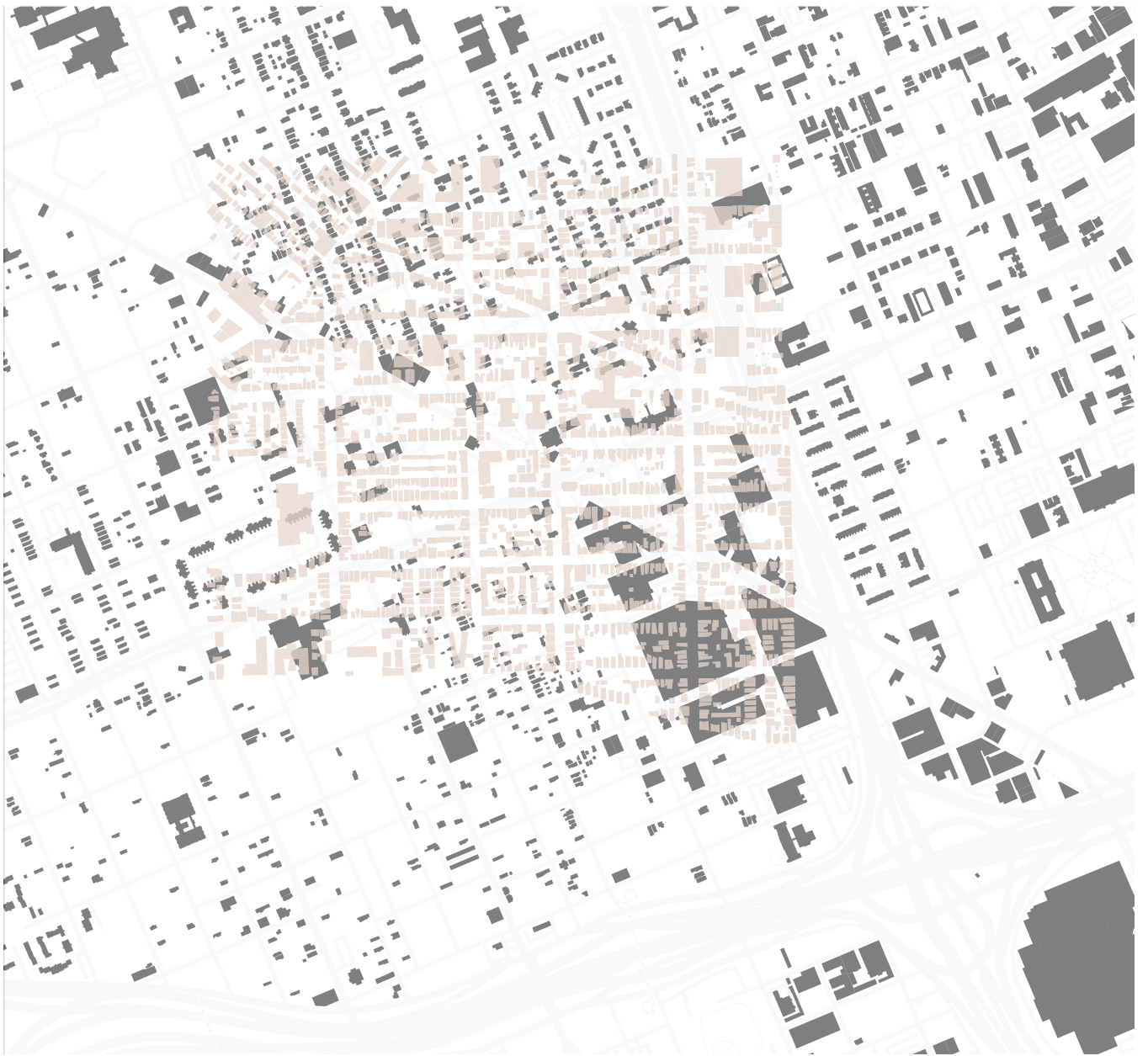


Figure 4.3.12 - Core City + Boston Scale Overlay Map

MAPPING OVERLAY / WARSAW OVERLAY

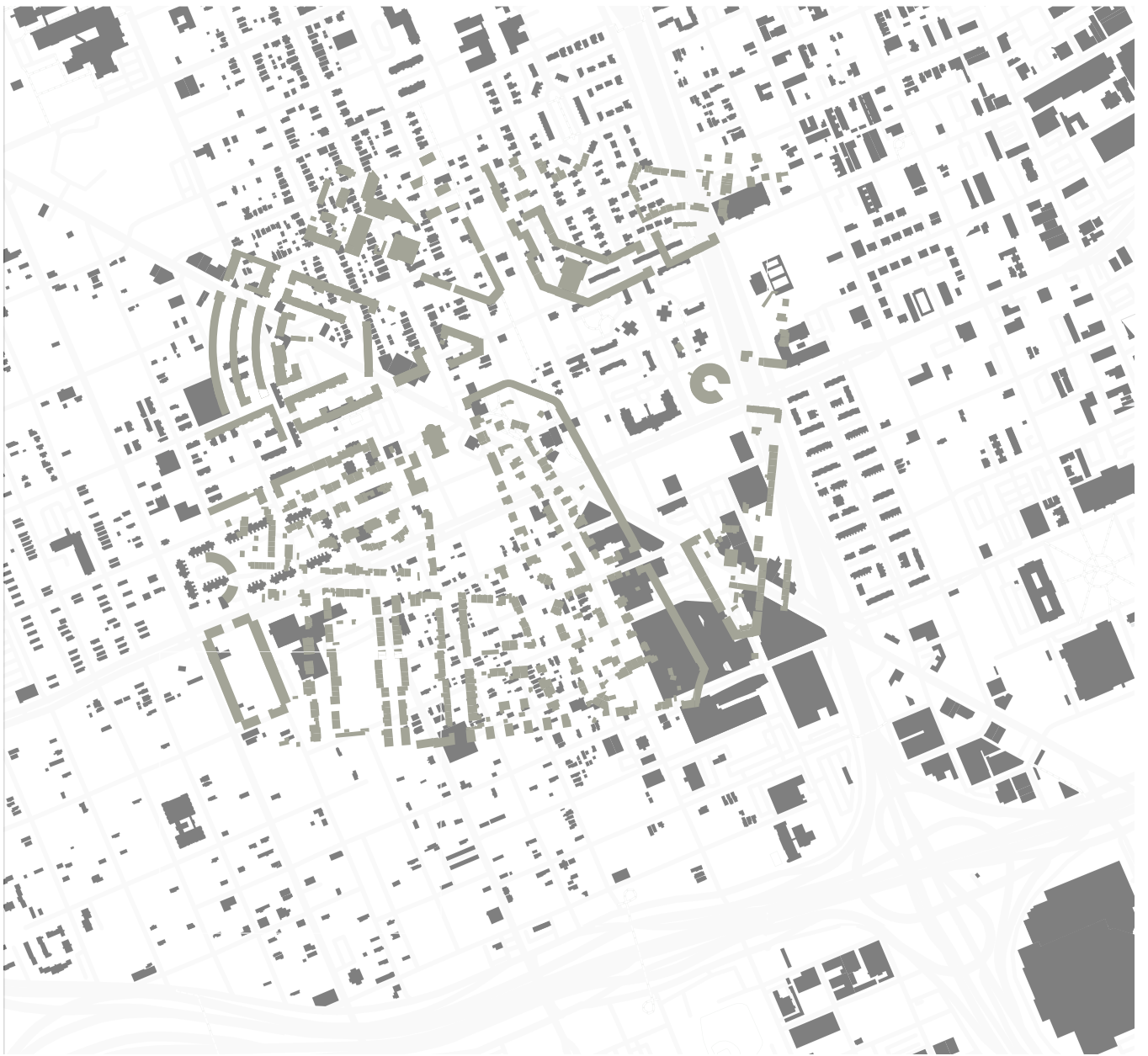


Figure 4.3.13 - Core City + Warsaw Scale Overlay Map

MAPPING OVERLAY | COPENHAGEN OVERLAY



Figure 4.3.14 - Core City + Copenhagen Scale Overlay Map

MAPPING OVERLAY | FLORENCE OVERLAY



Figure 4.3.15 - Core City + Florence Scale Overlay Map

4.4 FORM FRAMING PLACE

MASTER PLAN

Urban design creates connections between humans and places; movement and form. The Core City neighborhood in Detroit introduces a case study for implementing an urban framework; *Form Framing Place* strategy. Diverse “Missing Middle” housing typologies provide housing at various prices, demographic changes, and creates walkable neighborhoods. This analysis creates opportunity zones for future intervention of spatial connections between the forms. How can analyzing “Missing Middle” housing typologies allow for the implementation of a Form Framing Place strategy in Detroit?

The *Form Framing Place* strategy addresses the lack of housing diversity in the Detroit Core City neighborhood. This strategy involves implementing new urban forms that bring in new diversity and density through people and buildings. This strategy aims to create a more diverse and sustainable neighborhood that offers a range of housing options for people of different ages, incomes, and lifestyles. This will be achieved through the development of mixed-use buildings, townhouses, and apartments that can accommodate a range of household sizes and needs. The strategy also involves the creation of public spaces, such as parks and plazas, that provide opportunities for social interaction and community engagement.

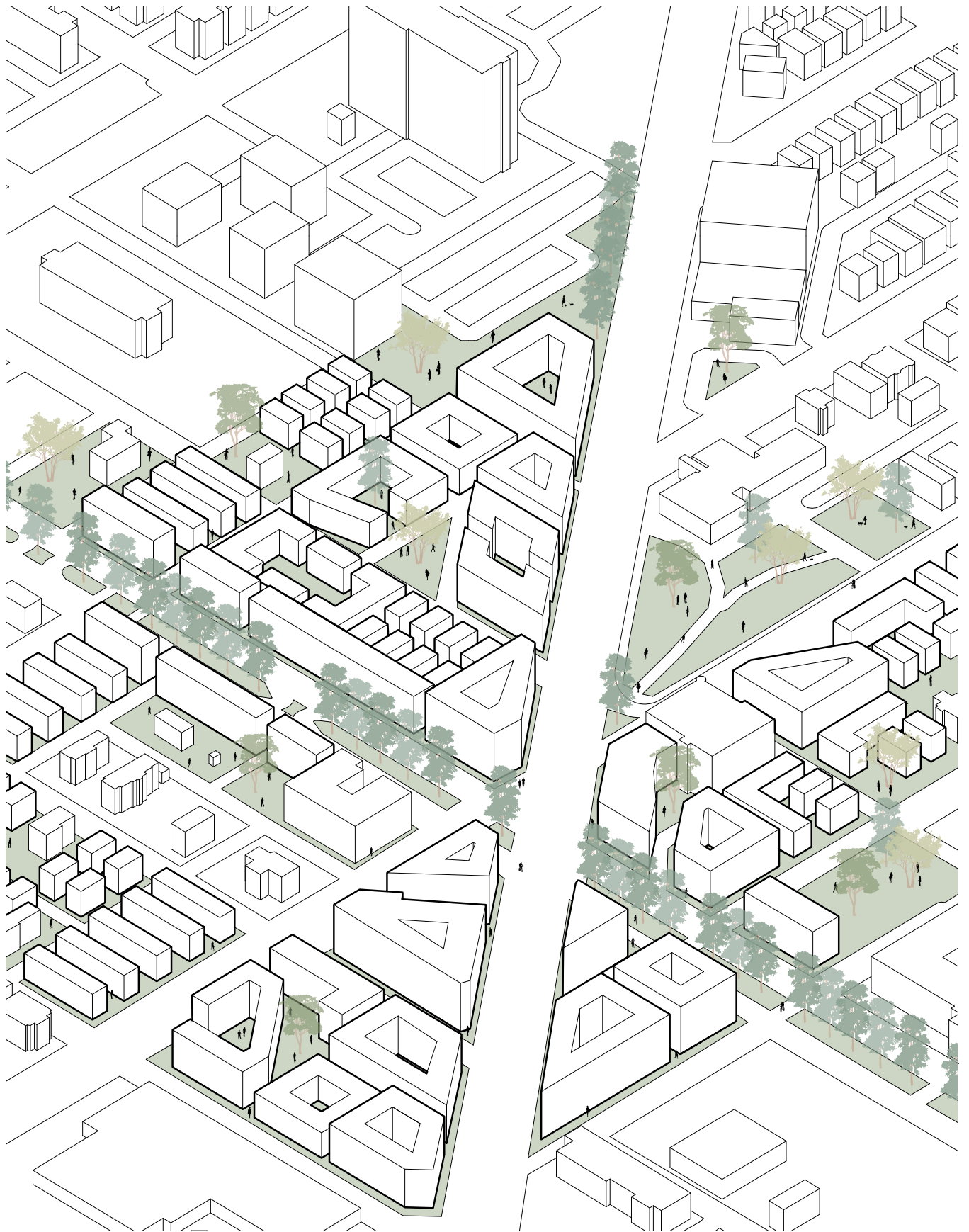


Figure 4.4.1 - Core City Master Plan

GREEN SPACES

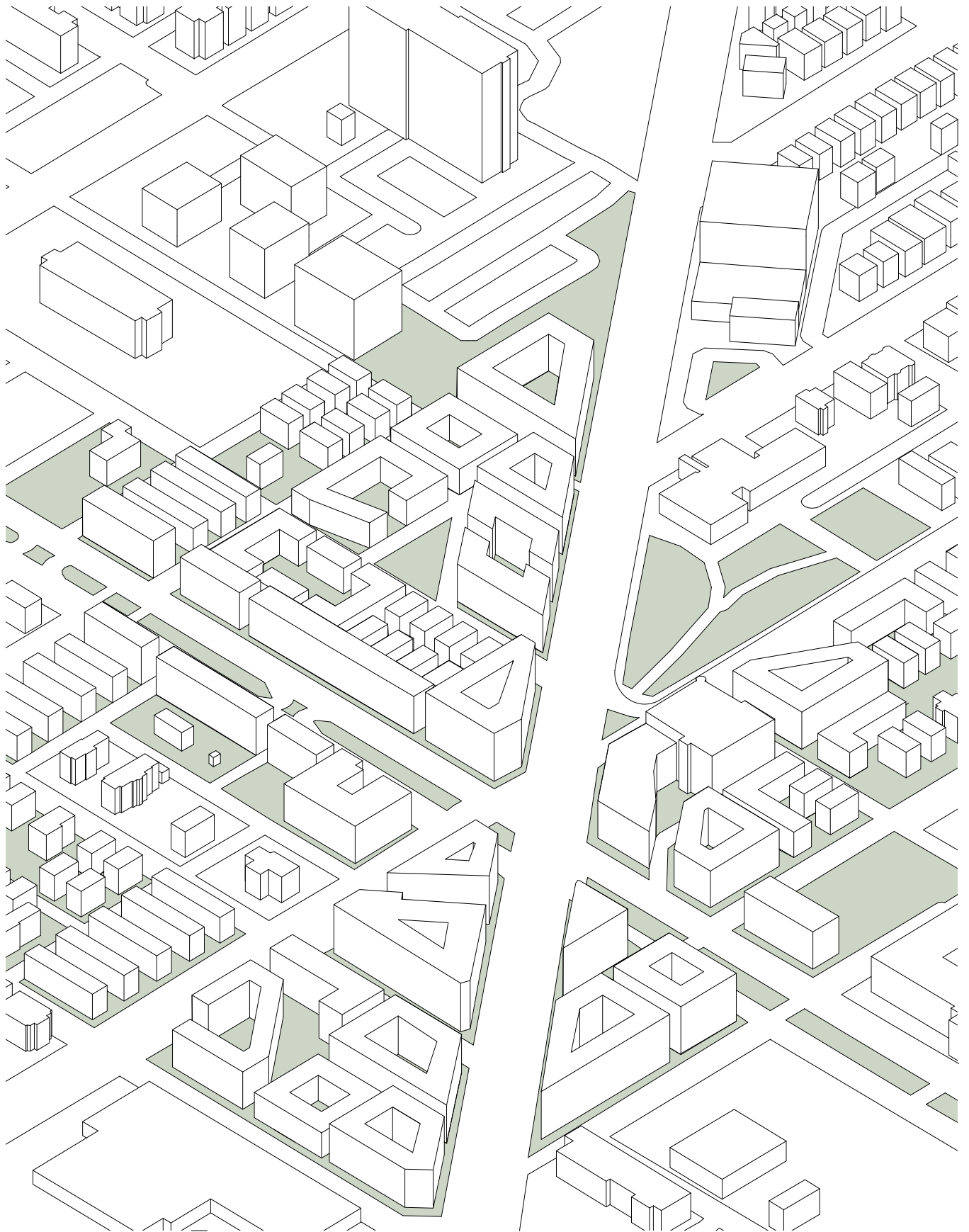


Figure 4.4.2 - Core City Master Plan Green Spaces

COMMERCIAL

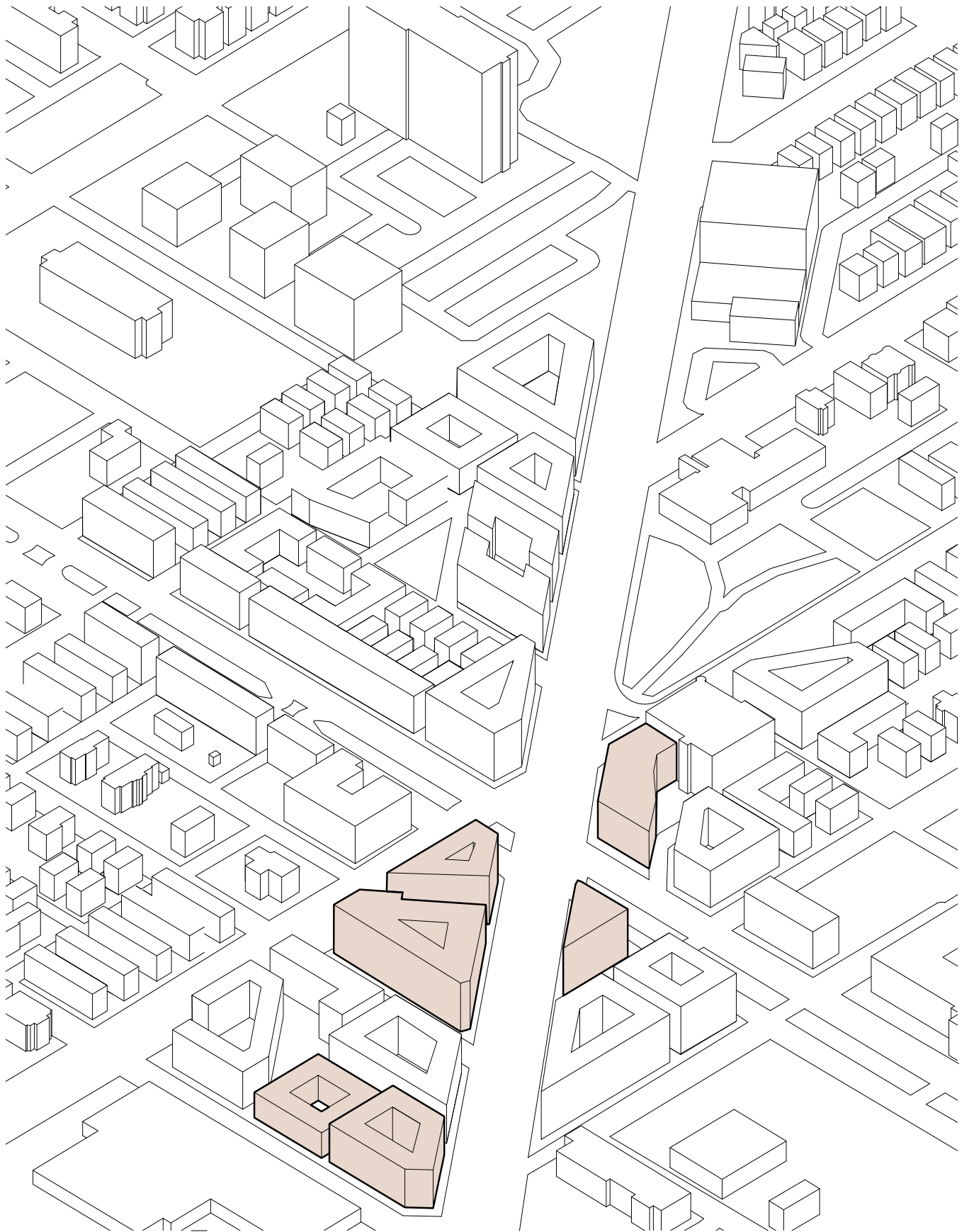


Figure 4.4.3 - Core City Master Plan Commercial

MIXED-USE

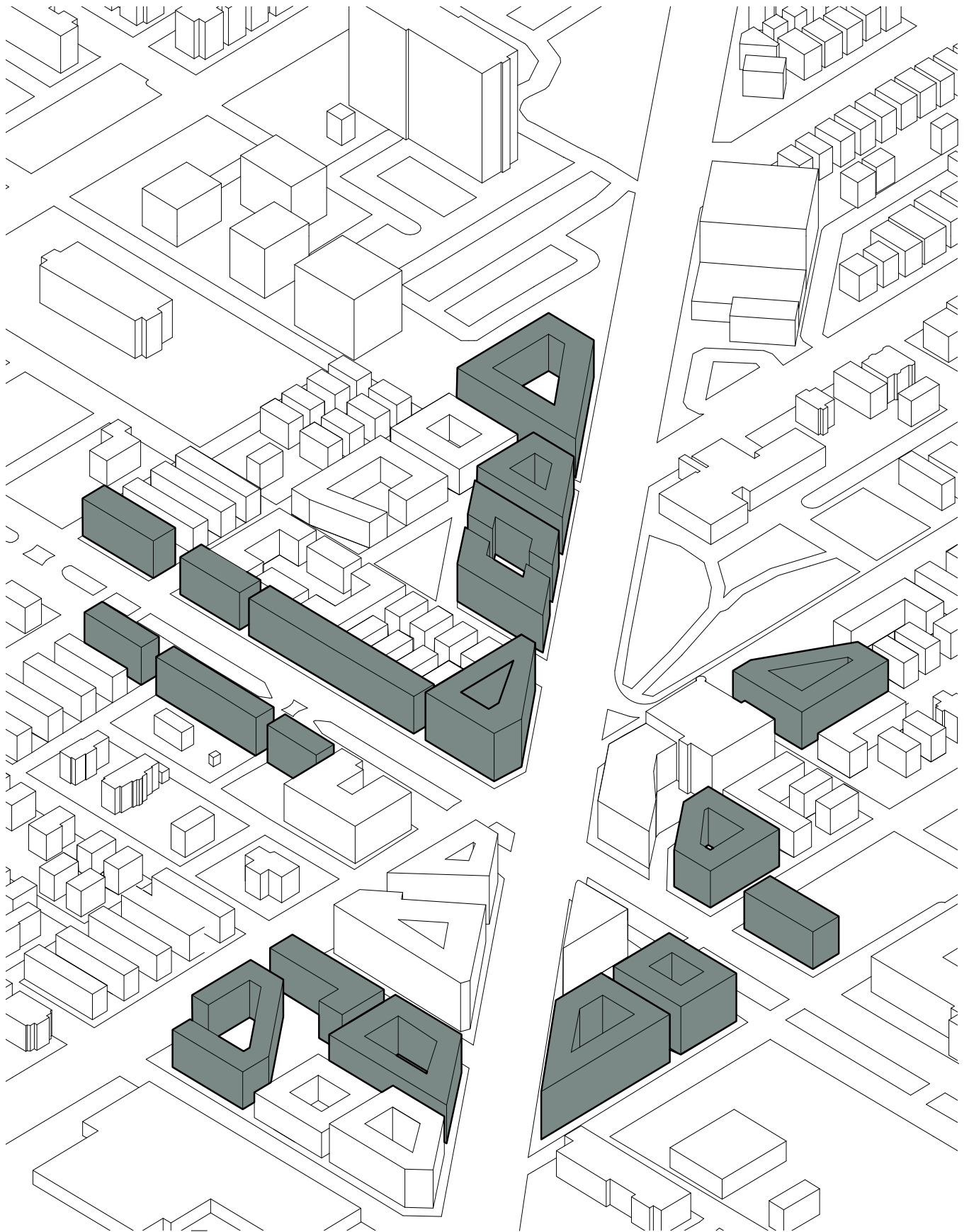


Figure 4.4.4 - Core City Master Plan Mixed Use

RESIDENTIAL

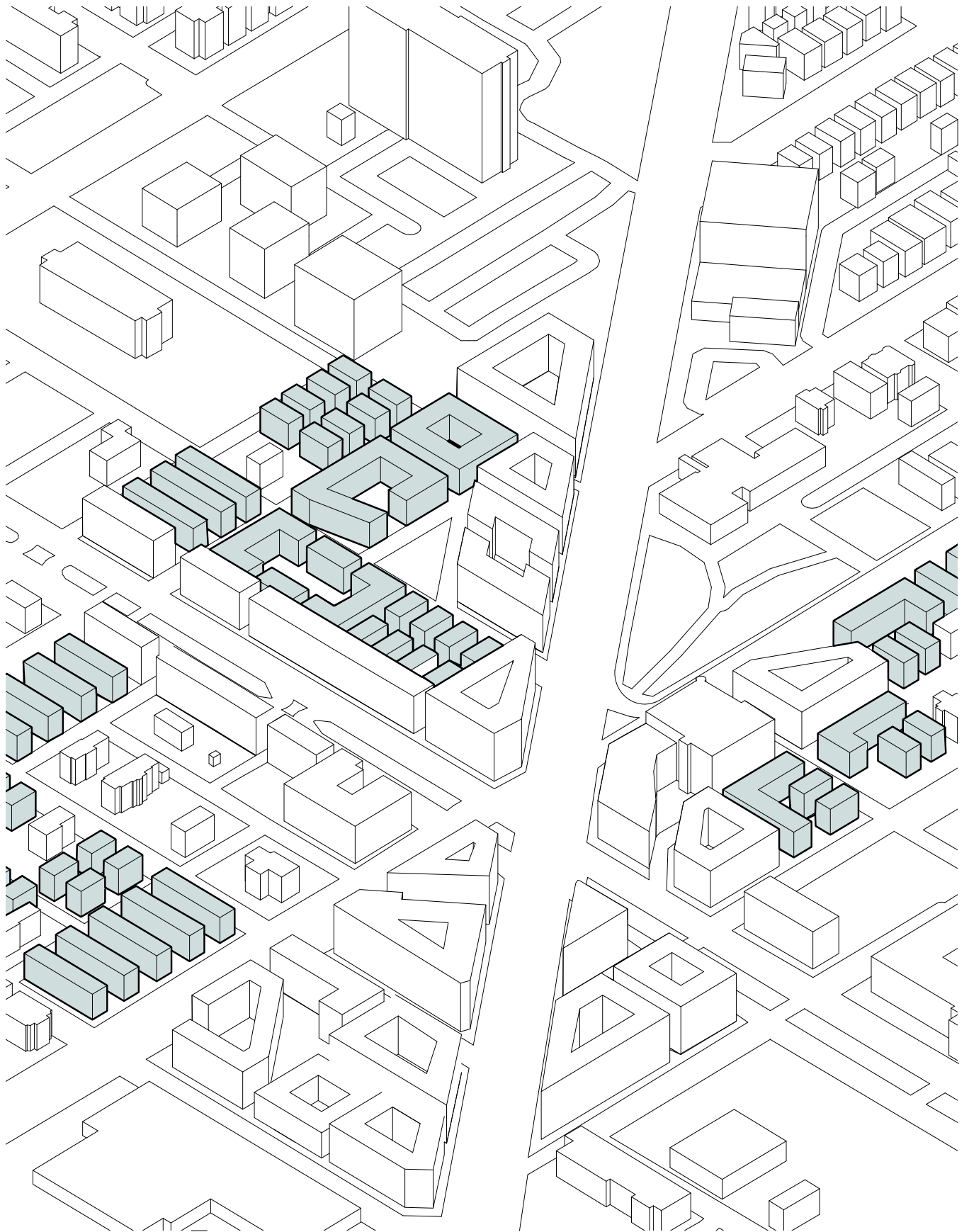


Figure 4.4.5 - Core City Master Plan Residential

R1 + R2 ZONING

The *Form Framing Place* strategy is a proposed approach to urban planning and development in the Detroit Core City neighborhood. The strategy seeks to address the challenges posed by the city's zoning ordinance, which prioritizes single-family housing at the expense of other types of housing. By breaking the monolithic zoning code of single-family housing, the strategy aims to create a more diverse and sustainable urban environment.

The proposed strategy involves incorporating a range of housing options and public spaces in the Core City neighborhood. This would allow for a more heterogeneous community that is self-sustaining and resilient to future changes. The strategy seeks to challenge the dominance of R1 and R2 zoning in the neighborhood, which limits the types of housing that can be built in certain areas of the city. The *Form Framing Place* strategy has the potential to revitalize the Detroit Core City neighborhood. By breaking the monolithic zoning code of single-family housing, the strategy would enable the creation of a more diverse range of housing options, including multi-family housing and mixed-use developments. This would not only create more affordable housing options for residents but also attract new businesses and economic opportunities to the area.

In addition to creating a more diverse and sustainable urban environment, the strategy would also create public spaces that encourage community engagement and social interaction. These spaces would be designed to promote healthy living, walkability, and a sense of place. By doing so, the neighborhood would become more vibrant and welcoming, which would in turn attract more residents and visitors to the area.

This strategy is an approach to urban planning and development in the Detroit Core City neighborhood. By breaking the dominance of single-family housing and incorporating a range of housing options and public spaces, the strategy has the potential to create a more diverse, sustainable, and resilient community.



Figure 4.4.6 - Core City R1+R2 Zoning

MONOLITHIC VS HETEROGENEOUS

A monolithic neighborhood is a community that lacks diversity, variation, and character. It is usually characterized by a uniform appearance with little to no variation in design. The lack of variation in housing options is one of the biggest disadvantages of a monolithic neighborhood, which might result in a homogeneous population with similar socioeconomic backgrounds. This could lead to a society that is more exclusive and closed off to new ideas and perspectives, where possibilities for social and economic mobility may be constrained.

To break this monolithic typology, a strategy of a heterogeneous neighborhood needs to be implemented. A heterogeneous neighborhood is one that has a mixture of different elements, such as building types, land uses, and design. This approach promotes social and economic diversity, vitality, and a sense of place. In a heterogeneous neighborhood, there is a range of housing options available, including single-family homes, apartments, townhouses, and condos. This diversity in housing options

attracts a wide range of residents, including people with different socioeconomic backgrounds, ages, and family sizes. This diversity creates a more dynamic and vibrant community, with a range of opinions and perspectives. This type of neighborhood encourages people to interact and collaborate, which can lead to a sense of community and social connectedness. In addition to a diverse range of housing options, a heterogeneous neighborhood should also include a mixture of commercial and public spaces. This includes parks, schools, community centers, restaurants, and shops. These spaces provide opportunities for people to gather, socialize, and engage in activities together. A mix of commercial and public spaces also creates job opportunities for people with different skill sets and backgrounds, which promotes economic diversity.

Overall, a heterogeneous neighborhood is an excellent way to break the monotony of a monolithic neighborhood. It encourages social and economic diversity, vitality, and a sense of place. It creates a vibrant community that is inclusive and open to new ideas and perspectives.

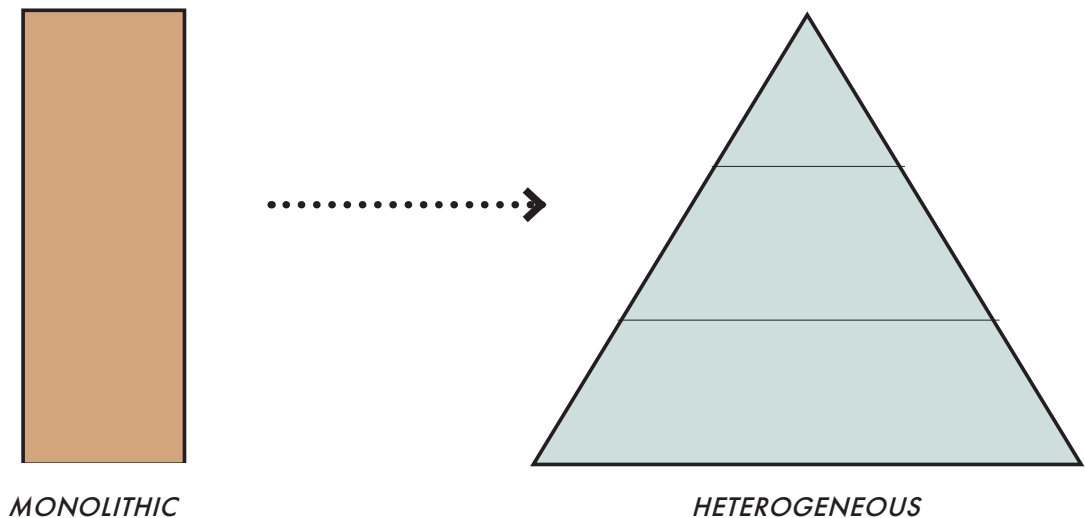




Figure 4.4.8 - Detroit Monolithic Neighborhood

SPATIAL ANALYSIS

Form Framing Place is a design approach that focuses on identifying the spatial qualities and ratios of the built forms in a master plan. The goal of this approach is to create a built environment that is conducive to human activity and interaction. The design process involves analyzing the site and its context, understanding the needs and desires of the users, and developing a set of principles and guidelines to guide the design.

One of the key features of *Form Framing Place* is its emphasis on creating spaces that are in close proximity to one another. This allows for a more human-scale environment that is easy to navigate and encourages interaction between people. By clustering the built forms, designers can create a variety of paths and nodes that connect different areas of the master plan.

The ratios and proportions of the built forms are also carefully considered in *Form Framing Place*. This helps to create a sense of harmony and balance in the built environment. For example, designers may use mathematical ratio principles to determine the proportions of different building elements.

Overall, the *Form Framing Place* approach seeks to create a master plan that is both functional and aesthetically pleasing. By carefully considering the spatial qualities and ratios of the built forms, designers can create an environment that is well-suited to the needs of the users and the context of the site.





ft

45ft





ft



4

36ft

oft



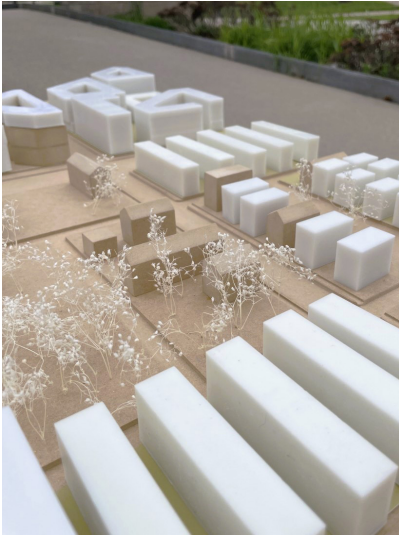


Figure 4.4.12 - Core City Physical Site Model



Figure 4.4.13 - Core City Physical Site Model



Figure 4.4.14 - Core City Physical Site Model



Figure 4.4.15 - Core City Physical Site Model



FRAMEWORK ELEMENTS

Urban form, building typologies, and third places are key components of the built environment that can shape the success of a neighborhood or community. Urban form refers to the physical layout and design of the built environment, including the arrangement of buildings, streets, and public spaces. Building typologies refer to the different types of buildings that exist within a neighborhood, such as residential, commercial, or institutional buildings. Third places, a concept popularized by urban sociologist Ray Oldenburg, refer to informal gathering places that are separate from home and work, such as cafes, parks, and community centers.

There are more solutions to the revival of Detroit than just implementing a diverse range of housing typologies. It's important to implement public space and "unbuilt" forms, in addition to the various housing types. Since a classmate's topic, Odette Giorgees, focuses specifically on these third places, merging our topics together will allow for us to cross ideas and work together to create a more developed project.

To create successful third places in neighborhoods, a framework with ten essential programmatic elements was created after extensive research and understanding of urban form, building typologies, and third places. This framework was created with a co-thesis student, Odette Giorgees.

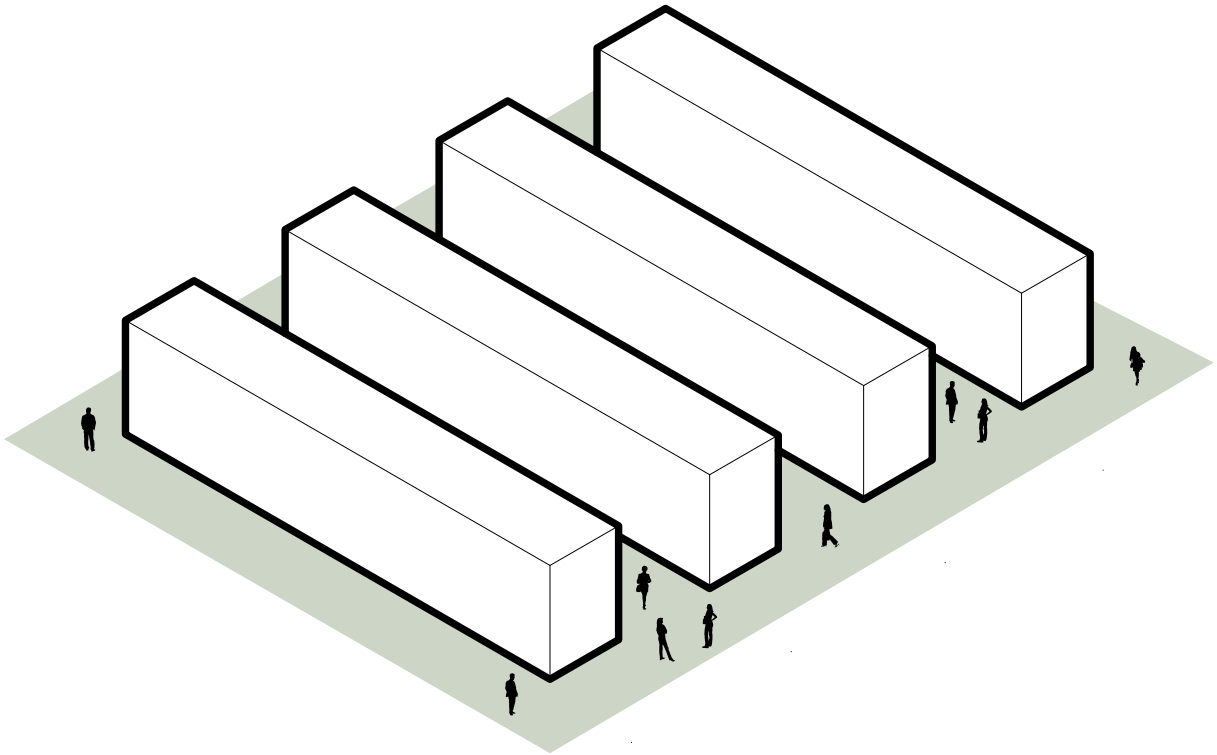
These ten elements are designed to activate the urban form and create inviting spaces that encourage community interaction and socialization. The ten essential programmatic elements include human scale, commercial public ratio, lighting, views, flexibility, connection and power, seating, shelter, restrooms and water, and unrestricted hours.

By incorporating these ten programmatic elements into the design and programming of third places, urban planners, architects, and designers can create successful and inviting

spaces that encourage community interaction and socialization. This, in turn, can lead to stronger and more resilient communities that are better equipped to address social, economic, and environmental challenges.

FRAMEWORK ELEMENTS | HUMAN SCALE

Third places designed to human scale feel more comfortable to use because they are proportional to the human body and therefore create a more intuitive and user friendly environment. By considering the needs of human users, buildings that are designed to human scale can promote a more positive and comfortable experience for everyone.



FRAMEWORK ELEMENTS | COMMERCIAL PUBLIC RATIO

Third places should have a 80% public 20% commercial ratio. Commercial programs in third places should be implemented to enhance the public activity rather than solely serving as places for consumption.

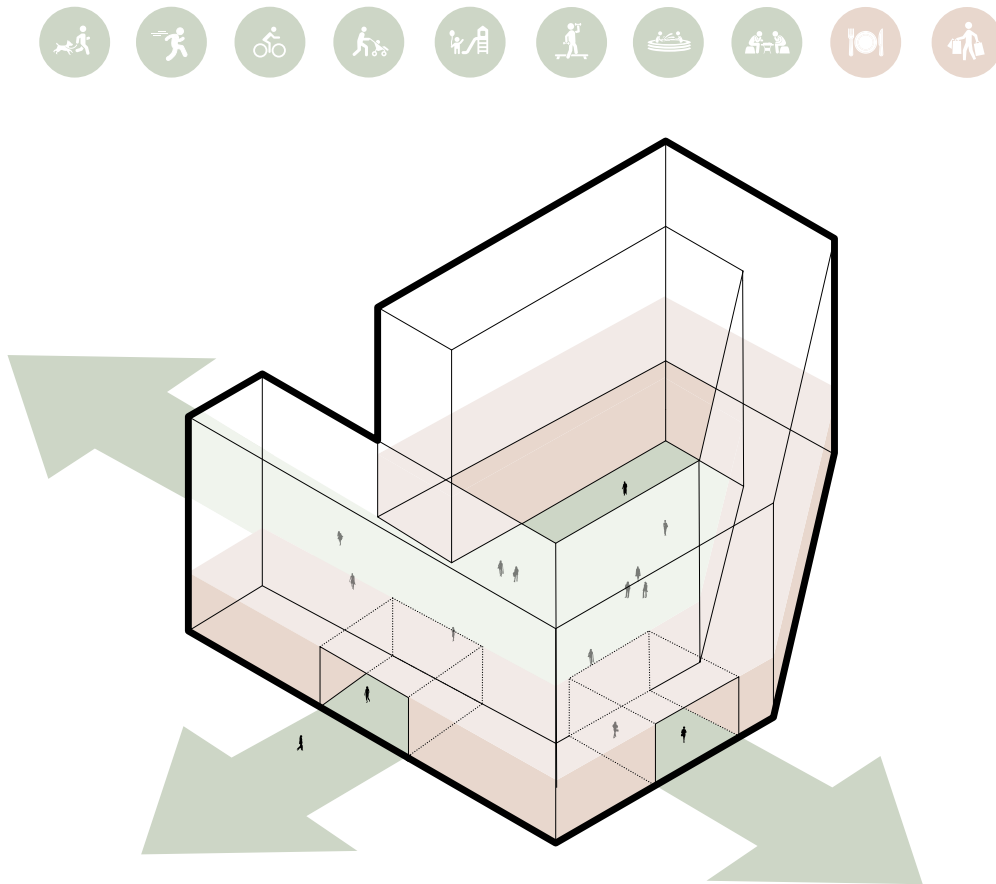
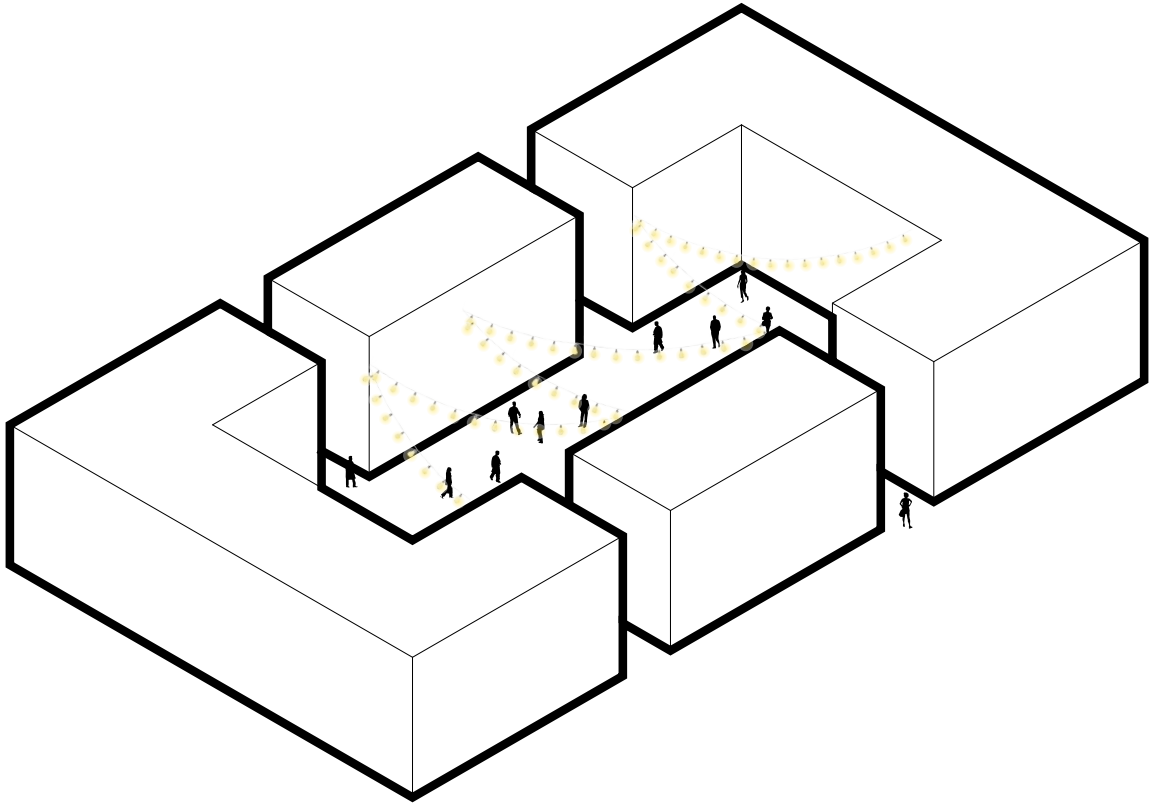


Figure 4.4.17 - Core City Master Plan Framework Element Commercial Public Ratio

FRAMEWORK ELEMENTS | LIGHTING

Third places should have lighting to ensure safety and visibility for all users, as well as to create a welcoming and well-lit environment for activities and gatherings. Good lighting can also have a positive impact on people's moods and emotions by promoting feelings of comfort, security, and relaxation.



FRAMEWORK ELEMENTS | VIEWS

To increase safety, third places should create viewpoints that allow the community to observe the public spaces at any point in the structure.

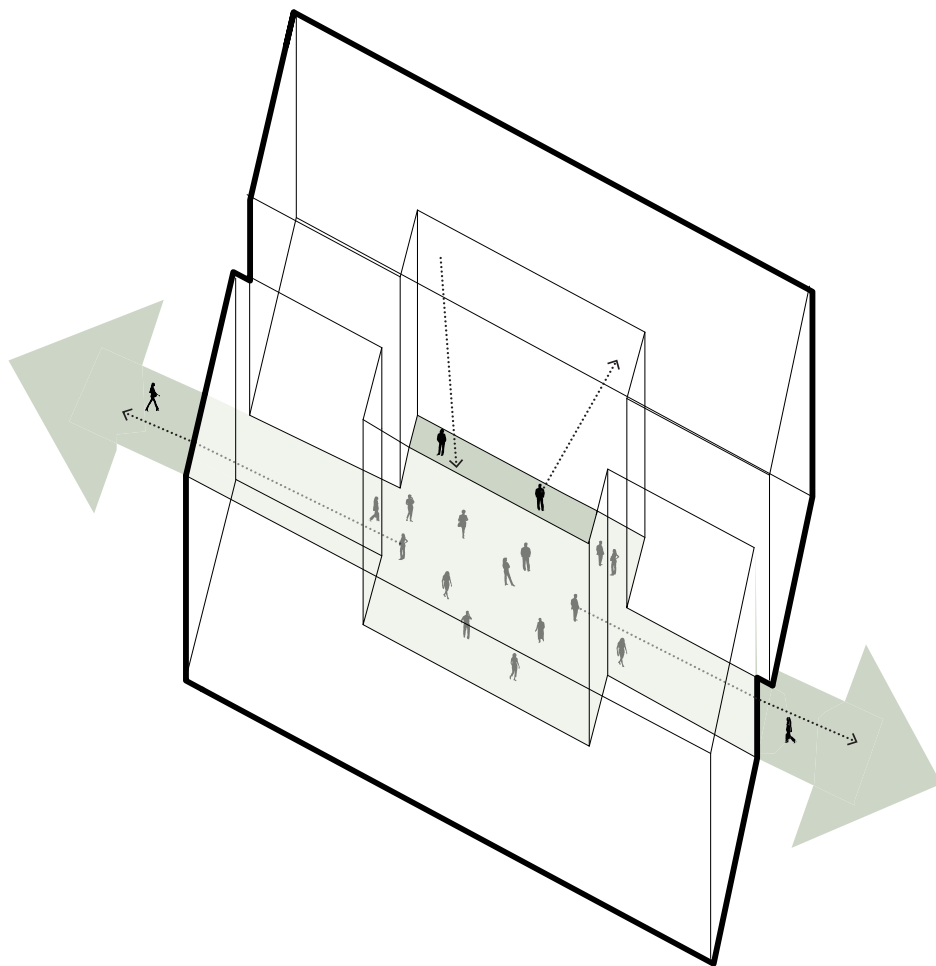
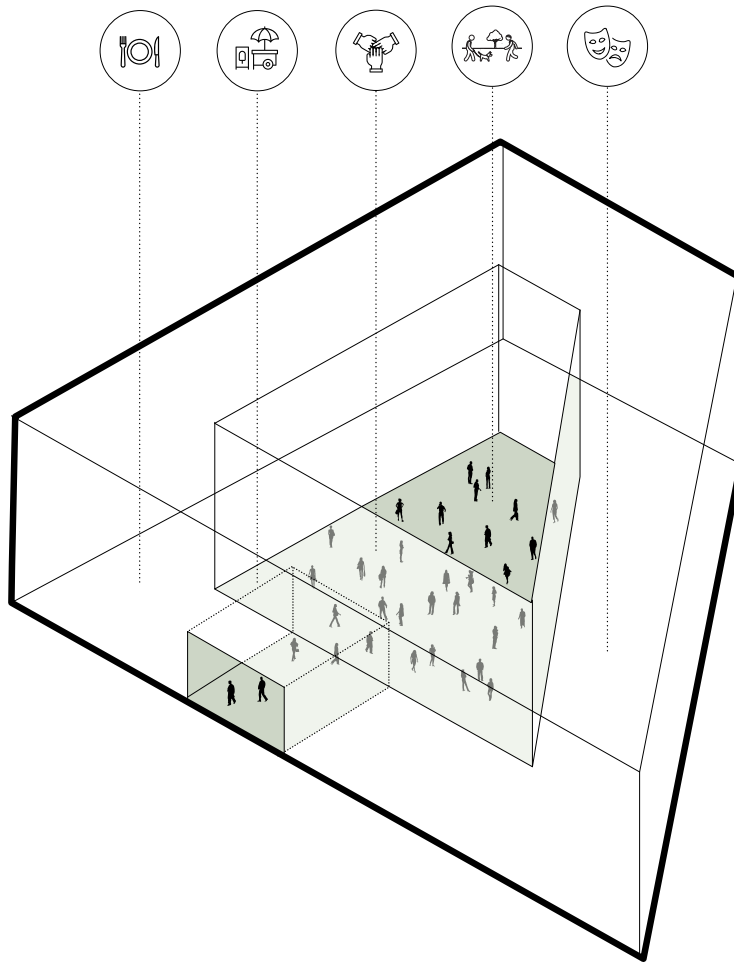


Figure 4.4.19 - Core City Master Plan Framework Element Views

FRAMEWORK ELEMENTS | FLEXIBILITY

It is important for third places to be multi-functional so that they are not limited to just one program, yet still have enough programmed elements that allow for community engagement and activation.



FRAMEWORK ELEMENTS | CONNECTION + POWER

Having wifi connection and power in third places is to provide access to the internet and support digital connectivity for all users, facilitating increased productivity, communication, and information sharing.

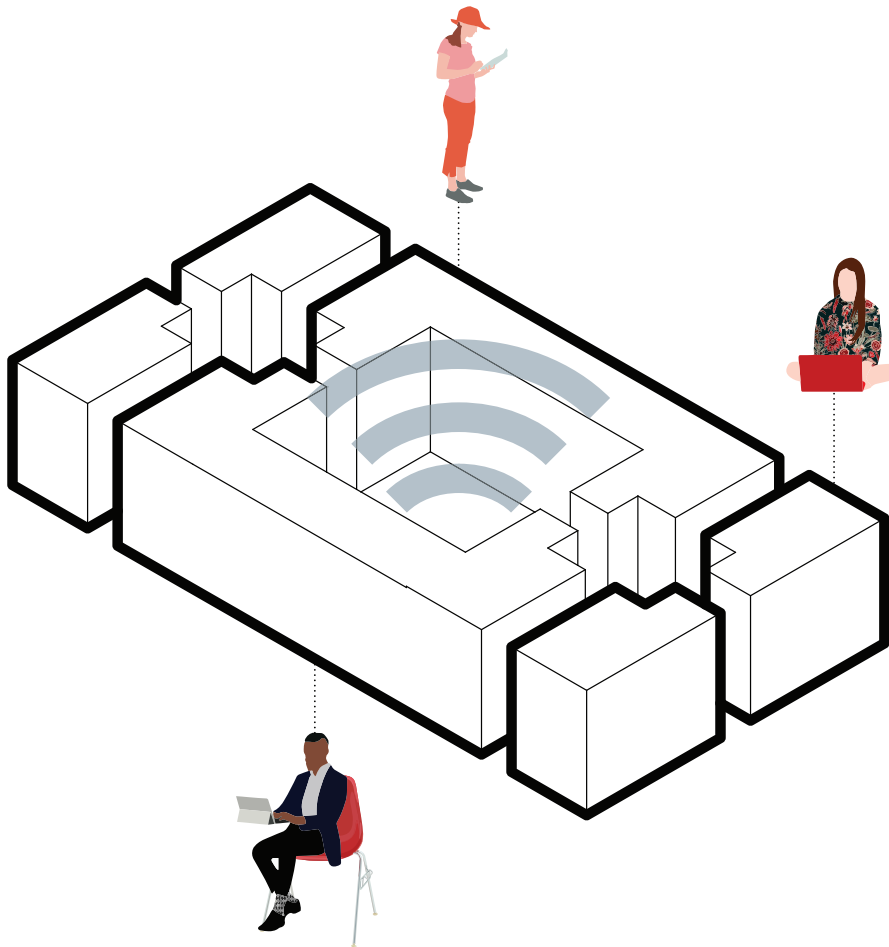


Figure 4.4.21 - Core City Master Plan Framework Element Connection + Power

FRAMEWORK ELEMENTS | SEATING

Seating in third places provides a place for people to rest, especially for those who are elderly, disabled, or otherwise in need of a break. Seating can be useful for people who are waiting for a bus, train, or someone else, or for those who are using public spaces for various activities, such as reading, eating, or talking with friends. Seating in third places can encourage social interaction and a sense of community, as people are more likely to stop and chat if they have a place to sit.

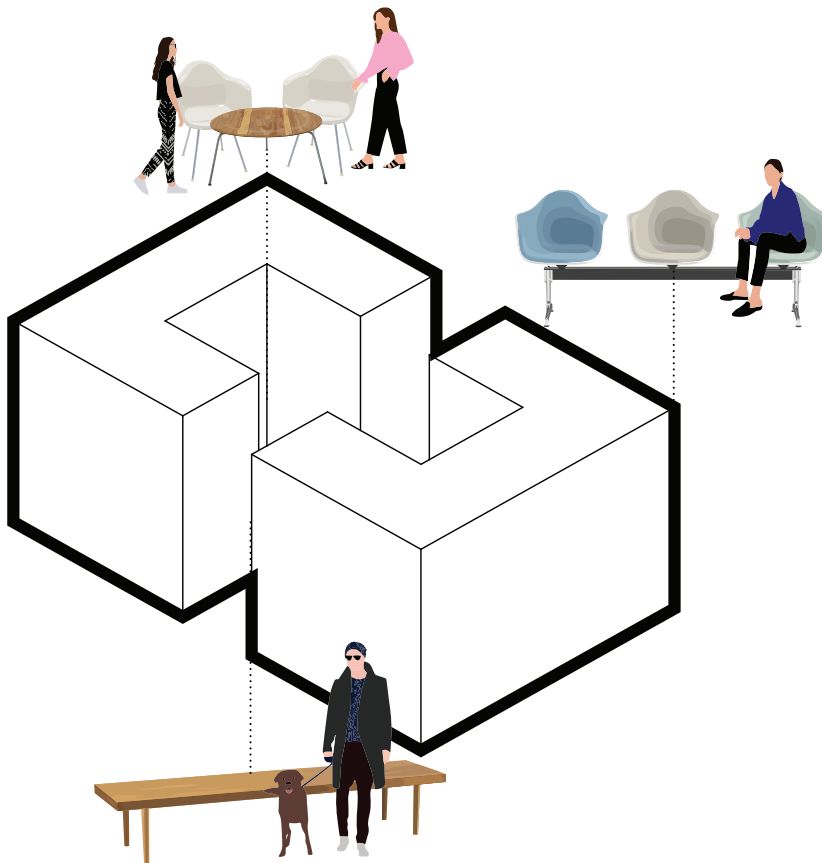


Figure 4.4.22 - Core City Master Plan Framework Element Seating

FRAMEWORK ELEMENTS | SHELTER

Third places should have a 60% outdoor 40% indoor ratio. Third places should have indoor shelter to provide a safe and comfortable environment for people during inclement weather and extreme temperatures. This allows for open spaces to be activated throughout all seasons.

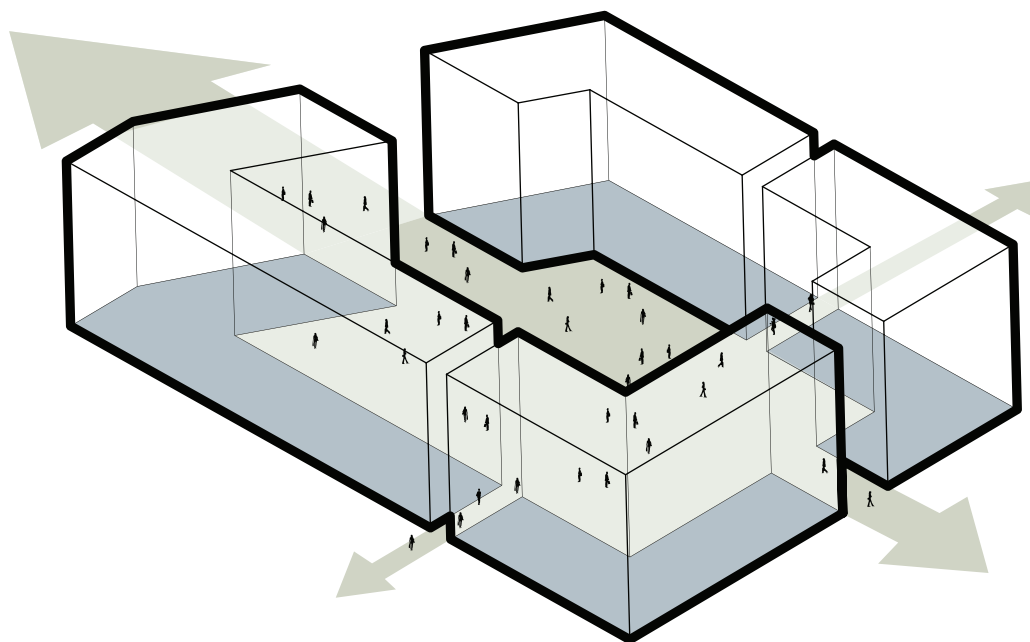
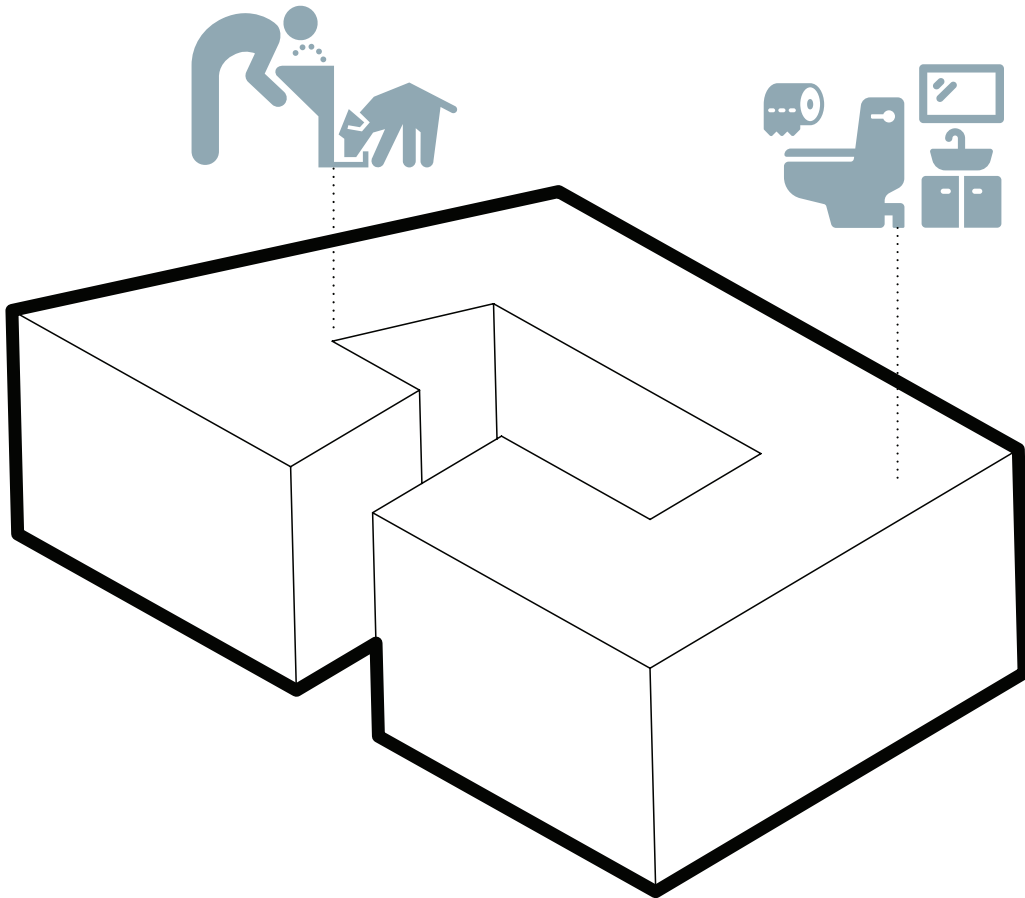


Figure 4.4.23 - Core City Master Plan Framework Element Shelter

FRAMEWORK ELEMENTS | RESTROOMS + WATER

It is essential to have public accessed bathrooms and drinking water in third places to meet the basic needs and health requirements of all users, promoting hygiene, comfort, and health, as well as providing a welcoming and inclusive environment for everyone.



FRAMEWORK ELEMENTS | UNRESTRICTED HOURS

Having unrestricted hours in third places provides equal access for all members of the community to use and enjoy the space for various purposes, promoting social interaction, community building, and improved quality of life. It also allows for maximum utilization of public resources and infrastructure, ensuring the best use of taxpayer dollars.

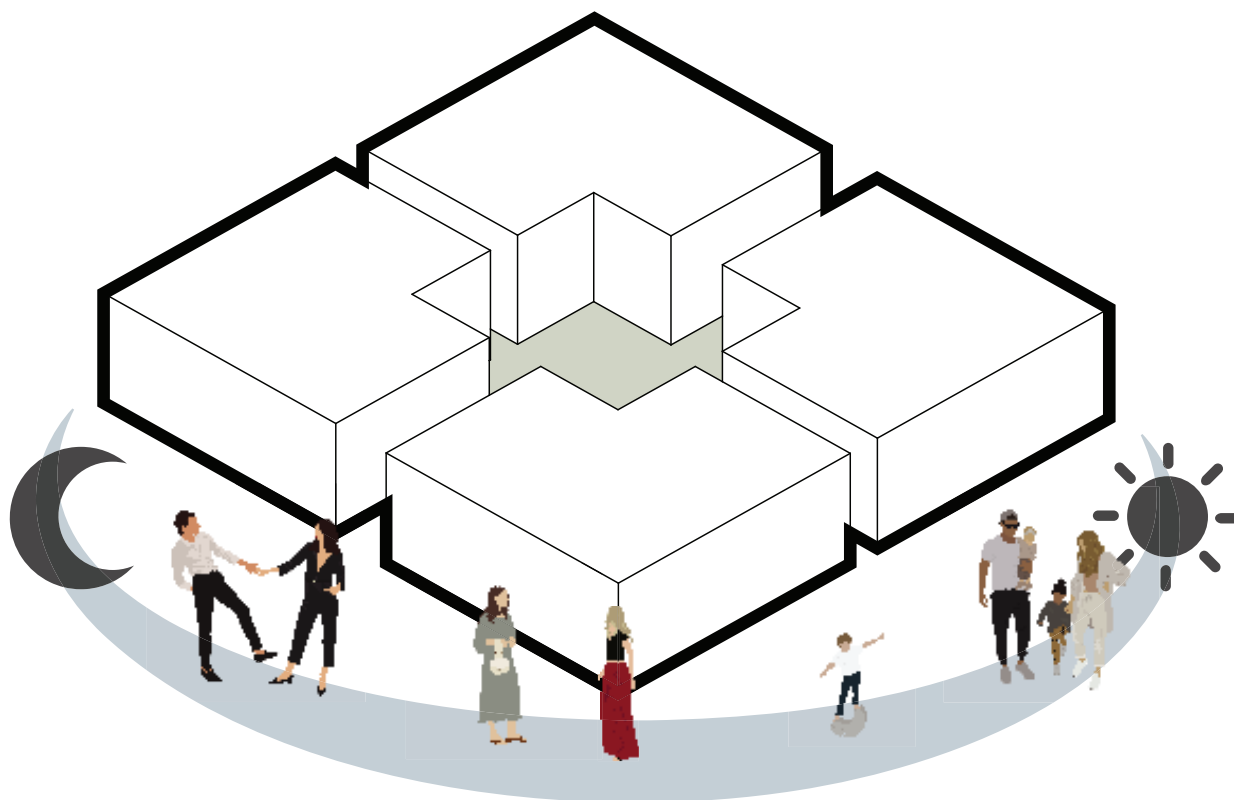


Figure 4.4.25 - Core City Master Plan Framework Element Unrestricted Hours



CONCLUSION

The creation of an applicable framework in Detroit that utilizes the ten essential programmatic elements and urban form is an important step in addressing the lack of diverse urban forms, typologies, and soft infrastructure in neighborhoods facing similar deficiencies. This framework serves as a framework for revitalizing communities and creating a more sustainable urban environment.

The *Form Framing Place* strategy, specifically implemented in the Core City neighborhood of Detroit, addresses the challenge of the lack of housing diversity by introducing a range of housing typologies and public spaces. This strategy is the result of studying urban forms from diverse cities across the globe, highlighting the importance of utilizing best practices from different contexts to address unique challenges.

The implementation of this strategy in Core City is a critical step towards creating a more vibrant and inclusive community. By introducing a variety of housing typologies and public spaces, the community becomes more diverse and welcoming to a broader range of residents. This diversity will enhance the neighborhood's resilience and sustainability, creating a stronger foundation for future growth.

In conclusion, the implementation of this strategy serves as a model for other neighborhoods facing similar challenges. By leveraging the best practices from diverse urban contexts and tailoring them to the unique needs of each neighborhood, communities can revitalize themselves and create a more sustainable and inclusive urban environment. The *Form Framing Place* strategy in Detroit sets a precedent for other cities and neighborhoods to follow, paving the way for a more equitable and resilient urban future.



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