



# PLAY NEIGHBORHOOD

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2016

thesis question



how can a play network create the neighborhood culture of outdoor play ?



## ABSTRACT

Nowadays the children's discretionary time is diminishing. In the modern society, children spend their free time more on television, computing, video games and such kind of indoor activities. In addition, children spent more time on studying, reading. Thus, the total time for play is reducing. Moreover, parental constraints stricter today than one generation ago, which contributes another reason for decreasing play time. However, play is an indispensable part for children's life. Children have fun in play and play promote children's physical, cognitive, and emotional development. Play is also important to brain development. Children interact in the world around them through play.

This project aims to enhance play quality and provide great experience to children in their daily life at their community. By building a car-free play street across a community and reutilizing the vacant lots and green spaces along the streets scattering within a community, play opportunities are greatly introduced to children. Thus a play network would be created within the neighborhood. The neighborhood culture of play could be cultivated by this play network, where play would be easier if they just need to open the door or go downstairs, neighbor kids are already



there playing around. Off work parents may take care of them to ensure safety. This atmosphere could stimulate parents to appreciate value of play and be willing to take their kids to go outside world and play more often.

The test is designed in a community, Techwood District Community, at Atlanta downtown. Children have less play opportunities at this place for the limited play space and simple play structure. Understanding people's most memorable and happiest experience of play in their childhoods, like gathering, achievement and discovery, helps reintroduce those experience into a play neighborhood thus to provide play opportunities and shape the neighborhood culture of play.

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## **IMPORTANCE OF PLAY**

This chapter provides a collection of literature reviews regarding to the importance of play and benefit from playing.

Play is an indispensable part for children. It is the most basic right for children and has the fundamental influence on children's growth and development (Hart 2002). The United Nations High Commission for Human Rights also recognized that play is a right for every child. There is a recognition of children's difference from adults and an acceptance of their need for play since 1600 in United States (Chudacoff 2007).

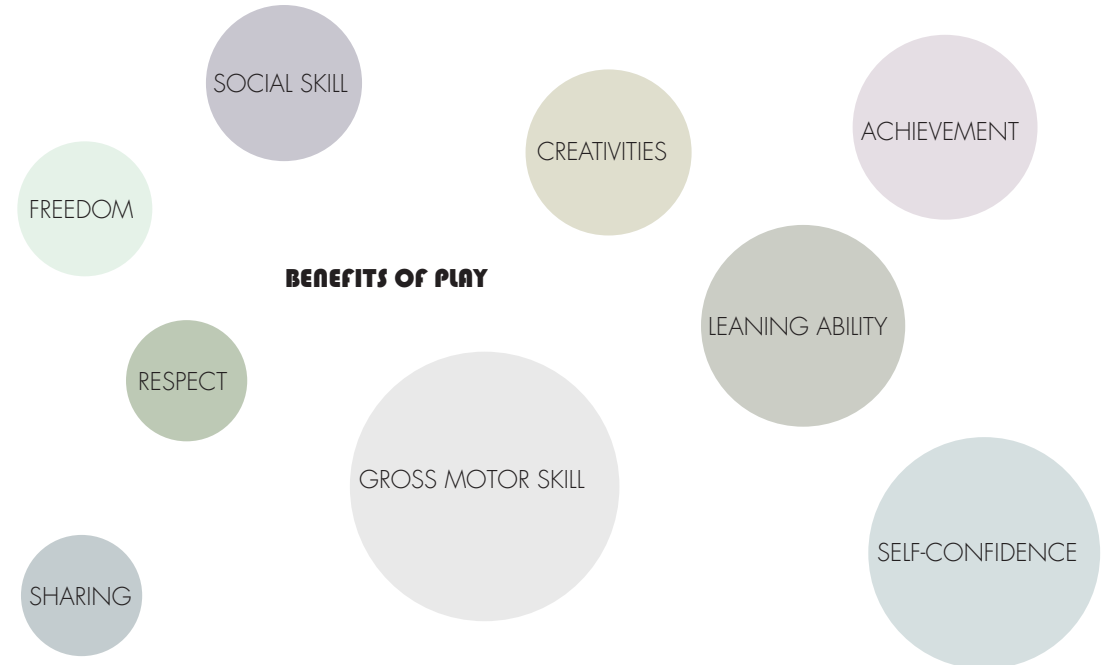
The importance of play to children's development has been largely accepted by professionals and academic research. A wide range of benefits are associated with children's rights to engage in outdoor play. Hestline and Holborn (1987) identified five themes of children's development: environmental, physiological, creative, educational and social. Frost (2012) specified four aspects of children's development in different stage, infants and toddlers, preschool years and the school-age child, of children: physical, cognitive, language and literacy and social and emotional. In a word, play is significant to the overall development of children.

The benefits of play have been indicated in numerous literature. Play could benefit the development of children's gross motor ability. They learn to communicate to each other and deal with problems during this process. They also learn and discover not only themselves but also the environment at the same time. As the result of play, they gain a sense of achievement, self-confidence and self-security. The creativity and ability of social skill increase over time.

People in different fields all emphasized the significance of play. From Greek philosopher, Platon, historian, Johan Huizinga to contemporary psychiatrist, Stuart Brown, they all advocated the importance of play.

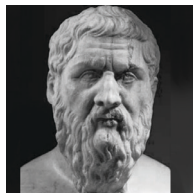
**DEVELOPMENT THEME FROM PLAY**

Hestline & Holborn's theory	Frost's theory
ENVIRONMENTAL	PHYSICAL
PHYSIOLOGICAL	COGNITIVE
CREATIVE	LANGUAGE & LITERACY
EDUCATIONAL	SOCIAL
SOCIAL	EMOTIONAL





## THEIR SAYINGS...



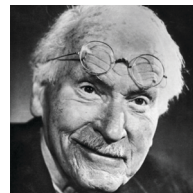
Platon  
Greek philosopher  
(427–347 BC)

“Do not...keep children to their studies by compulsion but by play”



Johan Huizinga  
Historian  
(1872-1945)

“All play means something”  
“Life must be lived as play, playing certain games, making sacrifices, singing and dancing, and then a man will be able to propitiate the gods, and defend himself against his enemies, and win in the contest.”



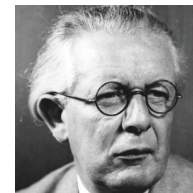
Carl Jung  
Psychiatrist  
(1875–1961)

“The creation of something new is not accomplished by the intellect but by the play instinct.”



Donald W. Winnicott  
Aediatrician,  
Psychoanalyst  
(1896–1971)

“It is in playing and only in playing that the individual child or adult is able to be creative and to use the whole personality, and it is only in being creative that the individual discovers the self.”  
“Play like dreams serves the function of self realization.”



Jean Piaget  
Biologist, Psychologist, Scientist  
(1896–1980)

“Play is the answer to how anything new comes about.”  
Play is a behavior or action and it causes the child makes effort about what to do.  
Play is critical in developing intelligence



Christopher Day  
Contemporary Author

Children obtain feelings of achievement and self-security, of being together with others, respect for themselves and others as a result of playing the play



Stuart Brown  
Contemporary Psychiatrist

“Play keeps us fit physically and mentally.”  
“Play allows us to develop alternatives to violence and despair; it helps us learn perseverance and gain optimism.”



Robin C. Moore  
Contemporary Researcher

“play lies at the heart of childhood, limited in its boundaries only by the opportunities afforded by physical settings and by the attitudes and commitment of those whose business it is to manage them.”

SOURCE: PLAY QUOTES, THE STRONG NATIONAL MUSEUM OF PLAY

## **TYPES OF PLAY SPACE**

This chapter classifies play space into indoor and outdoor play. An overall analysis on pros and cons of those types of play space could reflect the disadvantages of the existing play spaces.

## PLAY OUTDOORS AND INDOORS

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Generally speaking, play space is a place where play can take place. Indoor play and outdoor play are two broad categories of play space.

Indoor play happens at home, museum or indoor playground. The good side of these kinds of play is that it's hardly affected by weather like rain or wind. It can also keep children from dangerous strangers. However, it keeps them not simply from danger, but also from the complex and real environment. Outdoor play could take place in outdoor playground, parks, amusement parks or anywhere. It usually can benefit a wider range of social and age groups. Also, the more complicated and dynamic environment provides more chances for learning and dealing. In this process, children learn to be creative and social as well as the ability of learning itself.

As indicated in a study by Baranowski, Thompson, DuRant, Baranowski, and Puhl (1993), preschool children spent an overwhelming amount of time indoors than outdoors. Generally believing, the unique character of outdoor play as compared to indoor play includes "the potentially greater space and freedom of movement available to children and the availability of equipment and materials that enable children to engage in large muscle activities" (NCOLEA 2013) as well as enhance fine motor development.

The advantages and disadvantages of indoor play and outdoor play are analyzed in following pages.



**PROS**

**CONS**

**INDOOR**

HOME: ELECTRONIC GAME



are not affected by weather;  
could happens everyday;  
safest

are isolated from others;  
damaged vision;  
sedentariness

PLAYGROUNDS



are not affected by weather;  
safer;  
more facilities

standarized;  
needs company of parents;  
only suitable for younger kids

**OUTDOOR**

PARKS



more nature environment;  
complex environment

needs company of parents;  
only be access in spesific time;

PLAYGROUNDS



emphasis on gross motor skills  
easily access within walkable distance

standarized;  
lack of loose elements;

AMUSEMENT PARKS



great play atmosphere;

costly;  
long distance from residential area;  
needs parents' company

ANYWHERE



no time and space limits  
enhance creativity;

depends on environment;  
needs children's creativity



## MOST TYPICAL PLAY SPACE: PLAYGROUND

Playgrounds, as one of the most recognized media that children interact and play with, are established within centuries ranging from prefabricated play structure to natural playscape. These playgrounds are more or less achieved on playground popularization, children's safety and development of children's creativity and imagination.

However, those playgrounds are usually located in well-defined areas. In most situation, those fantastic playgrounds usually located in areas where far away from users' neighborhoods, such as city parks or commercial spaces. On the other hand, playgrounds which are located near or within users' communities are often built as fixed structures that limit children's exploration and investigation. Neither could provide children play on a daily base. Moreover, researchers and designers established guidelines for playground design. Play for all guidelines is a design guidelines and criteria mainly for public play environments and focus on the needs of children with disabilities (Moore 1992). Public Playground Safety Handbook, a publication of U.S. Consumer Product Safety Commission, helps to create a safe environment of playground environment for all children (U.S. Consumer Product Safety Commission 2010). These well-defined guidelines lead to standardized playgrounds and restrict children's outdoor play restricted into a specific play space such as the playground.



## **PLAY EFFICIENCY**

This chapter provides facts, reasons and disadvantages of play deficits and shortages of existing play types. Case studies show new explorations and their deficiencies in terms of daily play.

## FACTS AND REASONS OF INSUFFICIENT PLAY

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Although the importance of play has been studied, supported and proved by a wide range of people and in a wide range of fields through time, the current situation is that children's discretionary time is diminishing.

More and more researchers and educators indicated that contemporary children, especially those who living in urban environments, don't play enough (Gleave & Cole-Hamilton 2012). Actually, the first half of the 20th century is 'golden age' of children's free play. By about 1900, the need for child labor had declined since they are too weak to labor, so children had a great of free time (Chudacoff 2007). However, beginning at middle of 20th century, adults began to intervene children's free time. The situation on children's play is that they spend free time more on electronic media and adult-directed activities, as well as school and studying. In addition, parental constraints stricter leads to less play opportunities. They even forbid their kids from going out to play with other kids without supervision.



## DISADVANTAGE OF LACKING PLAY

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Play deficits lead to a serious problem. Since the 1950s children's time on free play is diminishing, childhood mental disorders have been increasing. Because of increased attention to academics, children spend more time on schools and studying. This changing which benefits on cognitive capacity doesn't offer physical outlets. This may lead to sedentary life style and obesity. In addition, children and youth are exposed to a wide variety of activities to prepare for their future development since parents believe those activities are the base to success. Those structured activities do have a developmental benefit for children. However, those adults-supervised or adult-driven activities may also lead to emotional distress like anxiety and pressures. In addition, parental constraints stricter leads to less play opportunities. Since Richard Louv have published his book, *The Last Child in the Woods*, and indicated that children live in the urban environment had less opportunities to play within real nature and decreased exposure of children to nature may lead to childhood obesity, attention disorders and mental illnesses (2005).



## SHORTAGE OF PLAY TYPES

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As analyzed in last chapter, there are both pros and cons in typical types of play space such as playground, parks, amusement parks. Those are not enough to solve the problem of children's missing opportunities in daily play. Usually the national parks or state parks are far away from living area. Definitely not within walkable distance. Recreation in that kind of areas usually needs company of parents and they only are accessed in specific time like break or weekends. So it is hard to provide daily play chances in those parks. Playgrounds, usually mean the standardized playground equipment, are usually located at neighborhoods, schools, commercial district or city parks, usually small and simple equipment in neighborhoods which provide less play opportunity, although they provide easily access for kids. They focus on development of physical skills but usually provide less opportunity in stimulating creation, since the number of ways to use the equipment is finite (NCOLEA 2013). The amusement park such as Disney Land usually have a high cost. It also in with a long distance from neighborhoods.

## NEW APPROACHING

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Since the current play space could not satisfied children's daily play, some people have explored how to provide kids better play opportunities in order to solve the problem.

As design professionals, landscape architects play a critical role in advocating and designing places for children to play, learn, and develop a relationship with outdoor world to carry them into an adulthood and citizenship.

There are some practices focus on the backyard and front yard in one's house. Since those play space are easily to access, it would provide opportunities for daily play.

## NEW APPROACHING1: PLAYBORHOOD

Playborhood, an idea from an father of three children, is trying to shape a rich neighborhood life by redesigning small pieces of play structures or elements in every family's backyard.

The designer as well as the author of *Plyborhood*, Mike Lanza, was a software and Internet entrepreneur in Silicon Valley. He cares about his own children and write the book *Playborhood* to advocates parents to transfer backyard into a vibrant space for kids to play. This case study is Mike Lanza's own house at Menlo Park, CA.

Those are design elements in Lanza's yard. Frontyard: whiteboard, picnic table with storage benches, media system (Projector, speaker and so on.), fountain oncrete driveway with mural, neighborhood mosaics, play river, basketball hoop, sandbox. Backyard: in-ground trampoline, playhouse, swing-set.



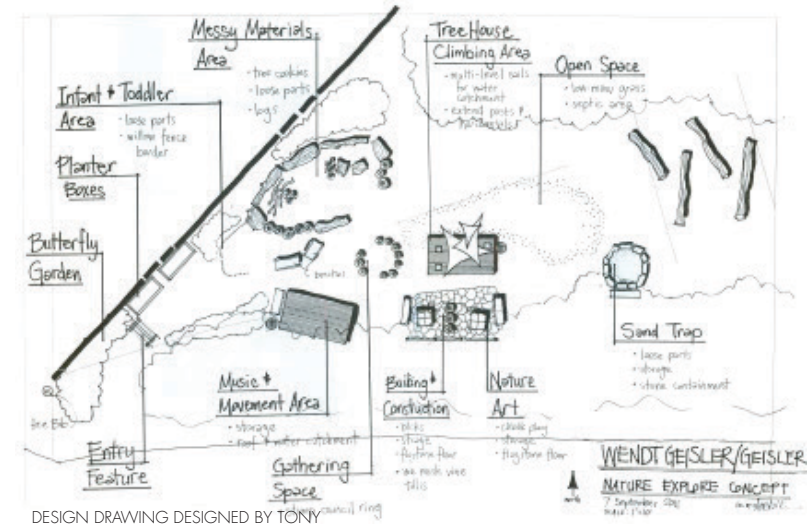
PLAYBORHOOD, MENLO PARK, CA.



## NEW APPROACHING 2 PLAYSCAPE

Tony Malkusak is a landscape architect in Iowa City, Iowa. His mission is to create a model that can provide a fun, vibrant "playscape", a nature-based landscape, in every yard in America. He has test his idea in five families.

Play elements are as follows: play sand, a pergola, sand pits, the stone stairway, the swing, the deck, the chalk board, storage shelves, benches in the pergola, the swing set, the tunnel; the water rapids, pondless waterfall, the prairie, a half-acre area with wild grasses that don't need cutting, the vegetable garden, the berry patches and a stage for kids' performances.



PLAYSCAPE, IOWA CITY, IA

### PROS AND CONS OF PLAYBORHOOD AND PLAYSCAPE

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Those practices do provide play opportunities for kids on a daily base. But they more depend on kids' parents. For those who don't realize the importance of play, or those who live in apartments and don't have backyards, it will be a loss to their children. Even they value play and have space for exploring and designing, they may be busy in working thus have no time in building their own yards.

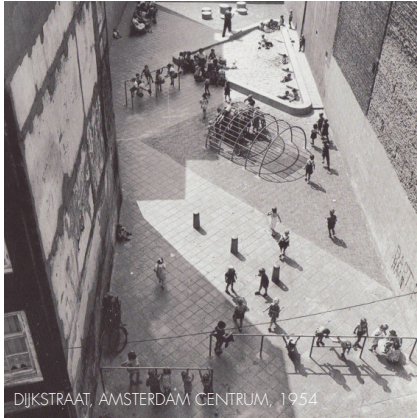
### HISTRIONIC APPROACHING: PLAY CITY

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Actually an extraordinary play city once existed in the history. Aldo van Eyck, a Dutch architect, cares young children and their use of outdoor space. He designed more than 700 playgrounds in Amsterdam, Netherlands within thirty years between 1947 to 1978.

This city became a network of public facilities for children in this period. The network of play in city really enhanced children's opportunities of outdoor play and provided play trend in Amsterdam at that time.

However, this urban heritage was almost demolished later. It is hard to have such sufficient space for playgrounds in cities due to it is much more compact today than before.



DIJKSTRAAT, AMSTERDAM CENTRUM, 1954



ZEEDIJK, AMSTERDAM CENTRUM, 1955, 1956



SAFFIERSTRAAT, PLAYGROUND BY V. EYCK, 1950, 1951



DURGERDAMMERDIJK, NORTH-EAST AMSTERDAM, 1955, 1957

## PLAY CITY, AMSTERDAM, NETHERLANDS

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Those researches show that contemporary problems exist in children's play and the current design approach is not enough for solve those problems. Exploration is needed for studying.

## **PLAY NETWORK AND CULTURE**

This chapter describes the necessity of building a play network and cultivating play culture to foster children's daily play and elicits thesis question for exploration.

From past experience of designing a space for providing more play opportunities, to build a play network and create a neighborhood culture of play within a neighborhood could be more efficient to achieve the goal of daily play not only for the near distance but also the play atmosphere.

The envision of neighborhood culture of play could be like this: children can easily access to the space, they only need to open the door or go downstairs, neighbor kids are already there playing around. The place is safe with off-work parents' care, but kids could still explore on their own, discover the world.

This kind of neighborhood full of play culture could provide most opportunities as play space. It not only serves as the hub of playing, but also helps to stimulate parents to value play and spend more time with their kids to the nature world.

So my thesis question is how can a play network create a neighborhood culture of outdoor play?





**THESIS QUESTION**

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**HOW CAN A PLAY NETWORK CREATE A  
NEIGHBORHOOD CULTURE OF OUTDOOR PLAY?**

## **DESIGN EXPLORATION**

This chapter is design test of play neighborhood. It provides the research method, design strategies and concept to shape play culture.

## RESEARCH METHOD

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To answer the question that how can a play network create a neighborhood culture of outdoor play, children's experience in the process of play should be understood since those experience can be reinvented in new design.

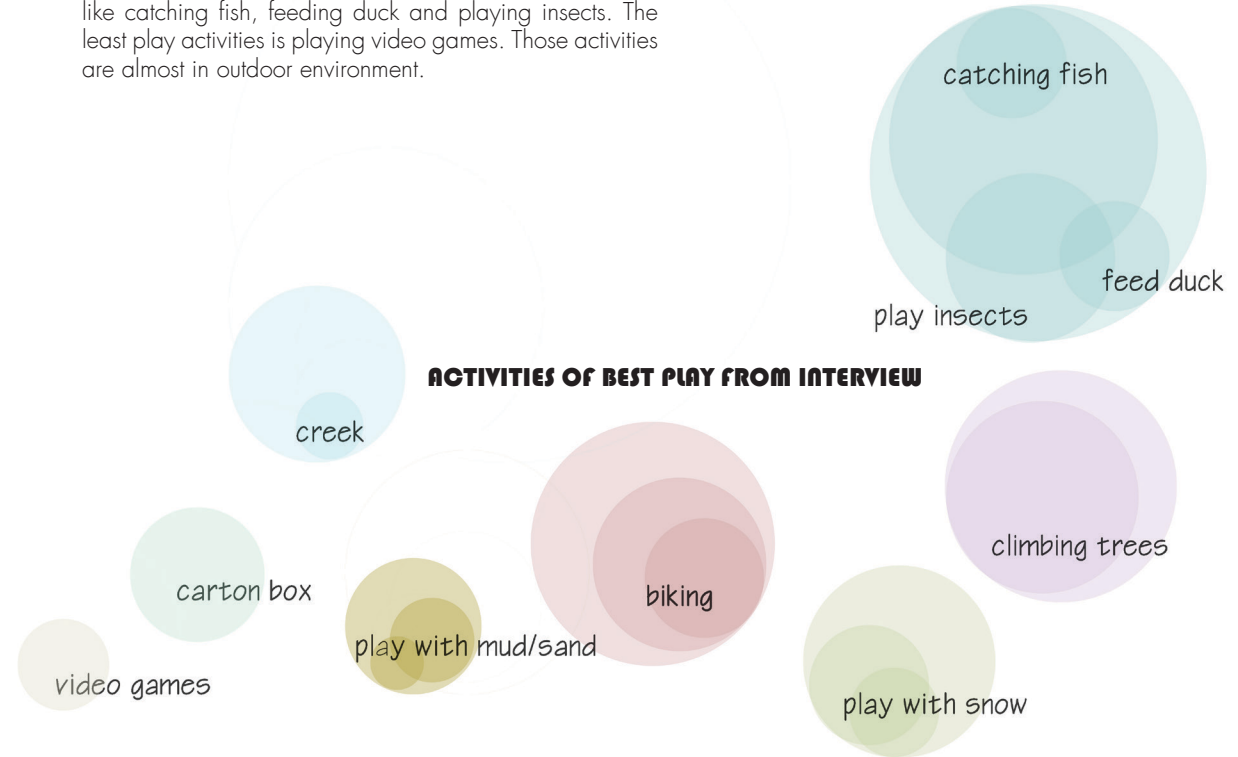
An interview has been carried out in order to understand children's experience. In this project, the adults's best memories and experience of play in childhood has been employed for study.

Interviewees are 27 adults ranging from ages of 22 to 52. They described their most memorable play activities and experiences.

## RESEARCH METHOD

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The activities happens from contryside, neighborhoods to modern parks and home. Activities of best play from interview shows that the most popular activities are nature play like catching fish, feeding duck and playing insects. The least play activities is playing video games. Those activities are almost in outdoor environment.





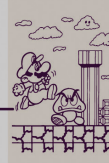
WOODS/COUNTRYSIDE



NEIGHBORHOOD



PARK



HOME

## RESEARCH METHOD

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**gathering**  
social meeting with friends  
-playing with familiar friends

**achievement**  
finishing an uneasy goal  
-like catching a agile fish

**risk**  
exposuring to a danger situation  
-may get from speed or height

**discovery**  
exploring something new  
or not showy by children themselves

**freedom**  
playing without restraints  
or supervision

**excitement**  
a feeling of great enthusiasm and eagerness  
-may provide speed or height

**company**  
playing with parents' company



## UNDERSTANDING PLACE

The community is called Centennial Palace. The original community Techwood Homes was the first public housing project in the United States. It was completed on August 15, 1936. Techwood Homes was demolished in 1996 before the 1996 Summer Olympics. It and neighboring Clark Howell Homes are now a mixed-use area called Centennial Palace. Because of the long history as the clear appearance of houses, this community has a strong identity. Centennial Place Elementary School, a YMCA as well as grocery and food lounge near around make this community a relative walkable and dynamic neighborhood.

Information of Centennial Palace

Area: 0.261 square miles.

Population: 4,912

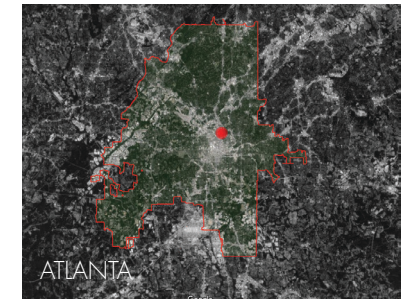
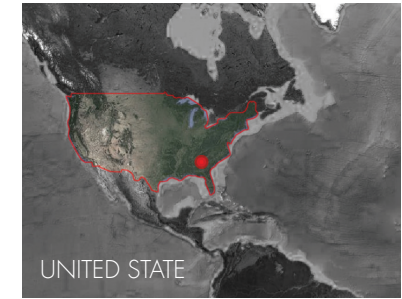
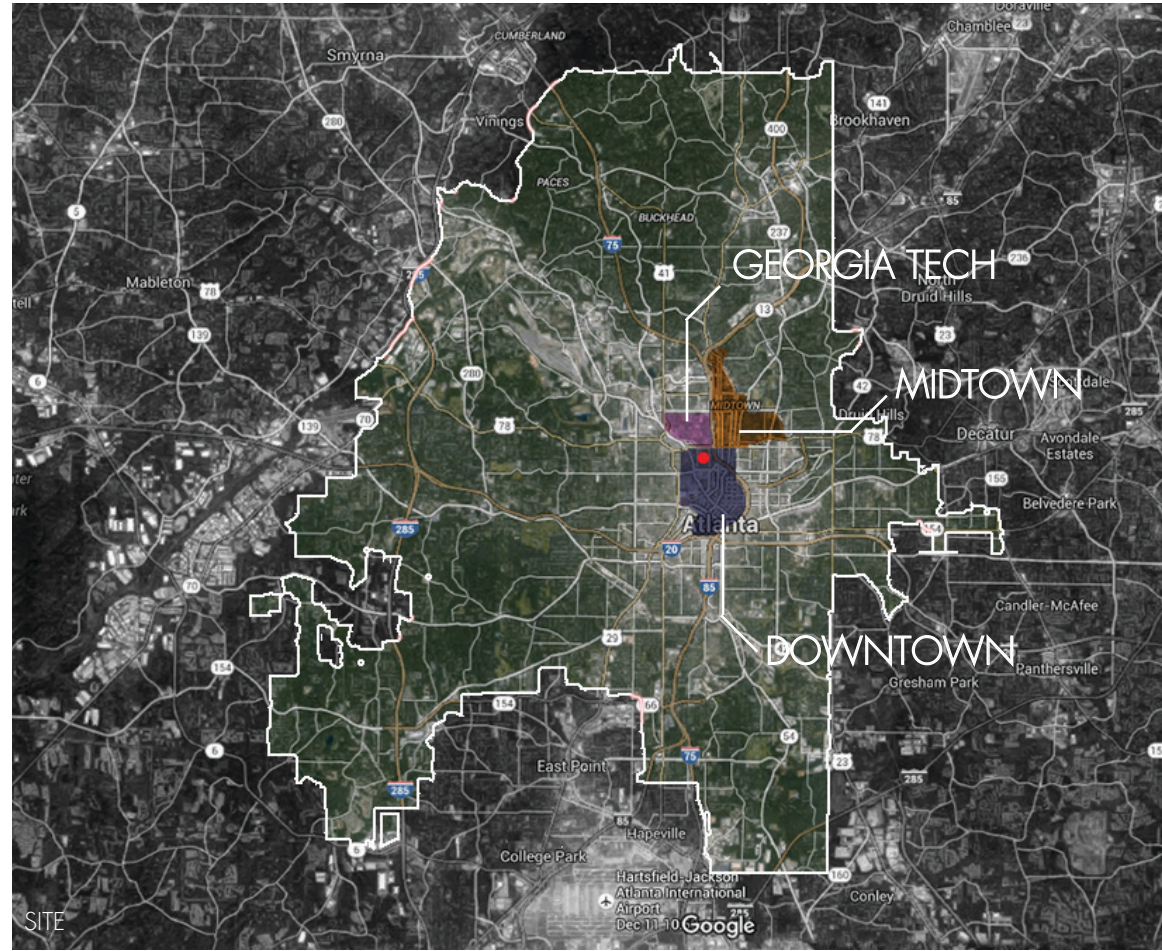
Population density: 18,822 people per square mile

Percentage of family households: 24.0%

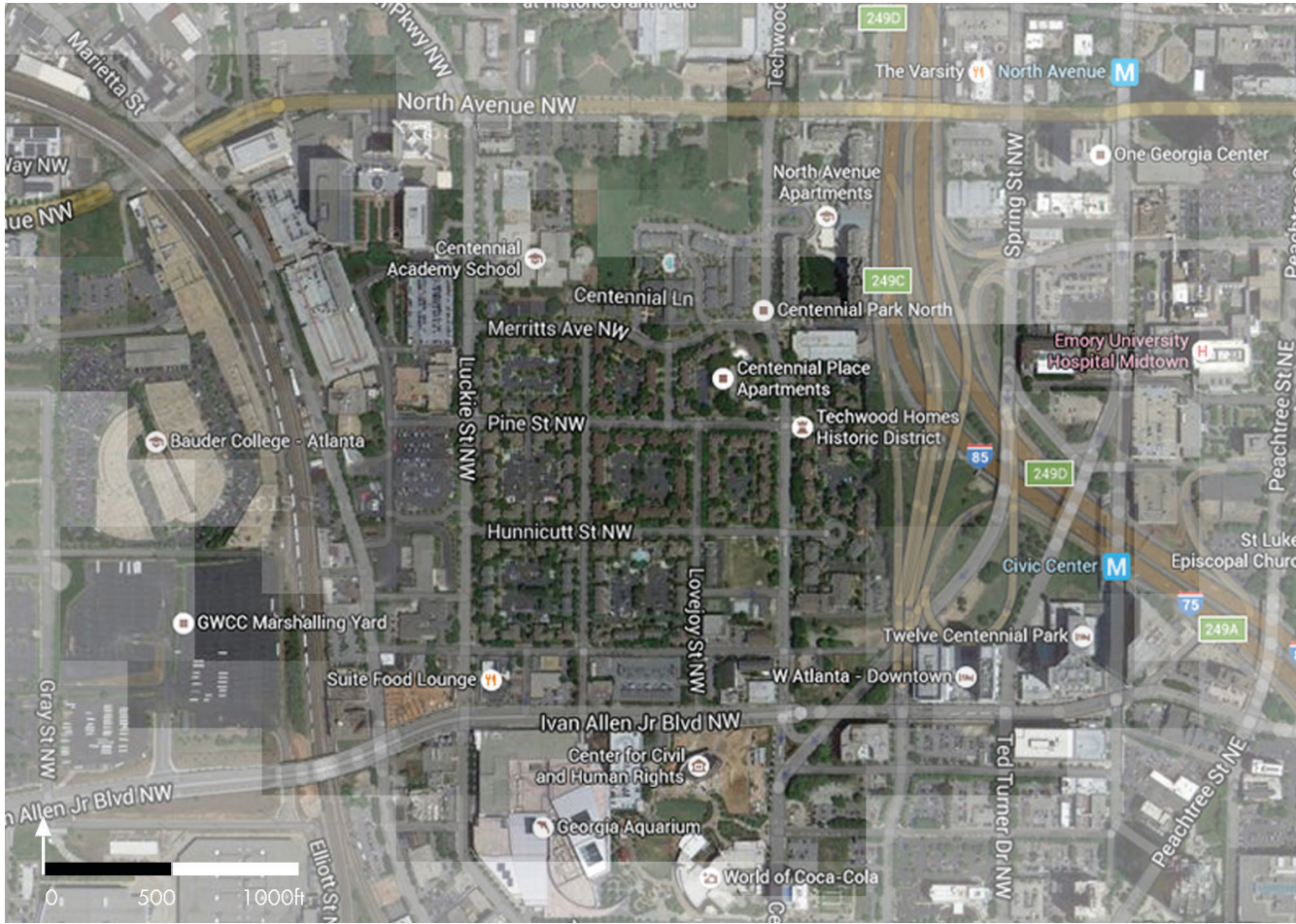
Percentage of married-couple families with children (among all households): 10.1%

Percentage of single-mother households (among all households): 33.2%

SOURCE : CITY-DATA.COM







## UNDERSTANDING PLACE

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The design site is located in a high-pacing downtown at Atlanta. The surrounding streets are busy and have a constant stream of cars, which would destroy the playing environment and cause parents' worry of car accidents. A study conducted by Donald Appleyard in the late 1960s reveals the relationship between street traffic and neighbor relations. The result shows that residents in heavy street had one third as many friends and half as many acquaintances as did residents of heavy street. It means that the automobile traffic would destroy neighbor relations. It can be inferred that the heavy traffic would have a negative effect on children's outdoor play.

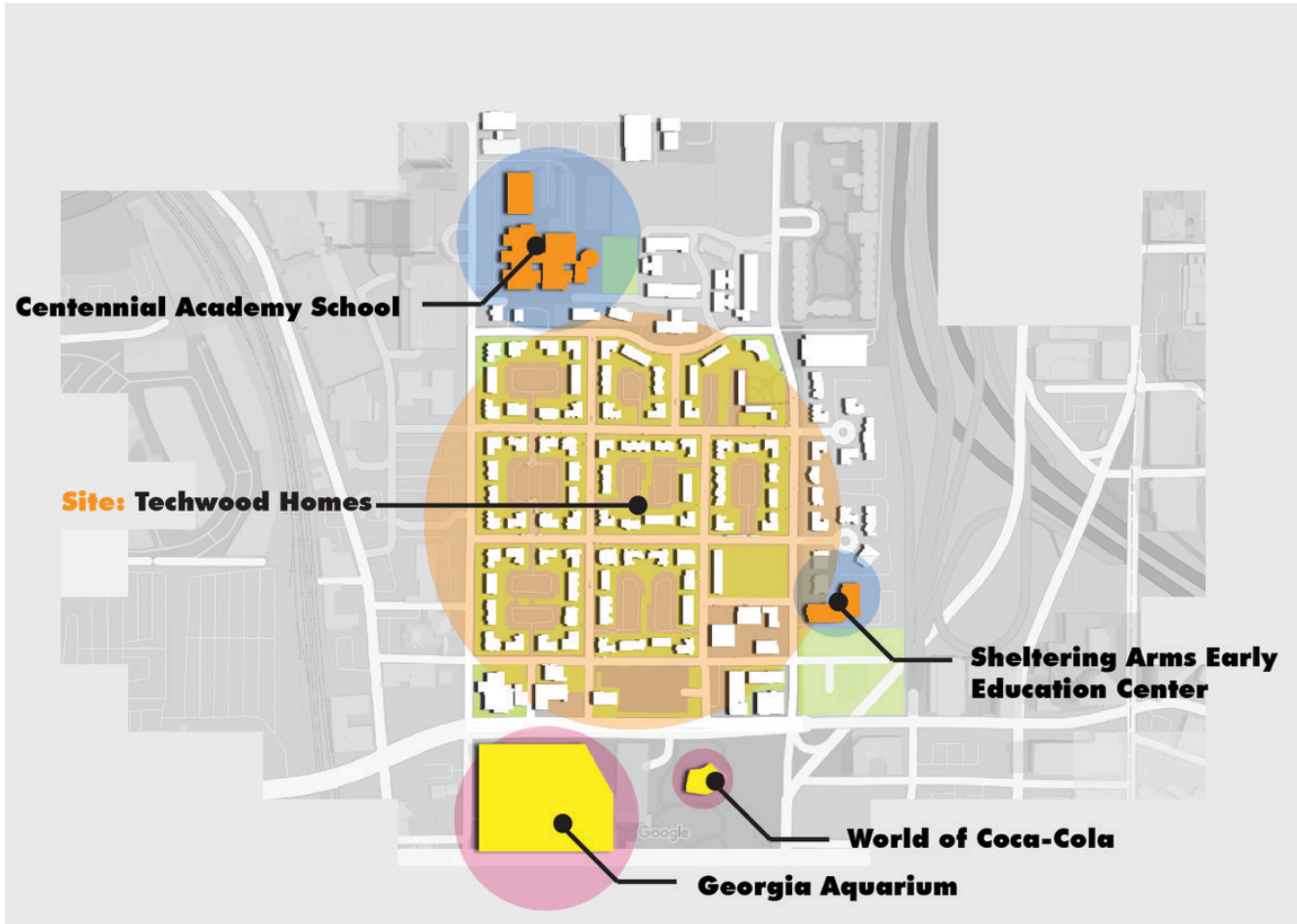


## UNDERSTANDING PLACE

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Right picture shows one block in the community. Each block has one, some times has two entrances. Some houses have stairs connecting to second floor. Majority of houses or apartments are facing two sides, the center and outside. Every center of a block is mainly dominated by concrete parking lots. The outside is an about 32' width street, two sidewalks in each side and green space. Each block has a simple play equipment.





## UNDERSTANDING PLACE

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The Centennial Academy Elementary School and Sheltering Arms Early Education Center is close to the site. Kids can walk to school and early education center. Streets among the community could be a great opportunity for free play. Georgia Aquarium and World of Coca-Cola are close to site crossing the Ivan Allen Jr Blvd.





WANDERING

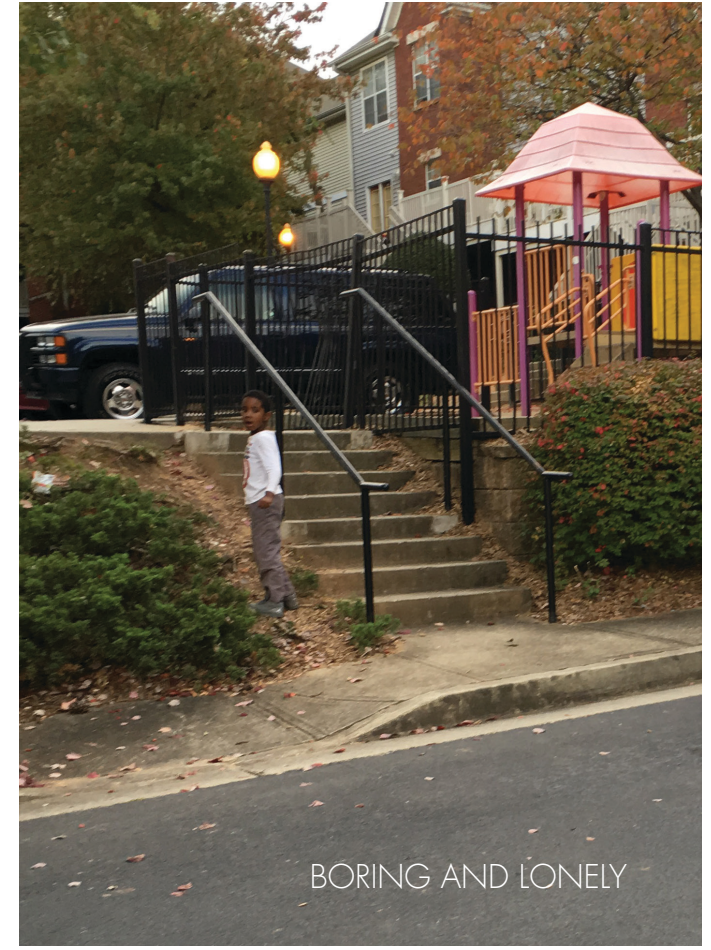


PLAYING AT PARKING LOT

#### UNDERSTANDING PLACE

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Children have less play opportunities at this place for the limited play space and simple play structure.

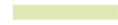


BORING AND LONELY





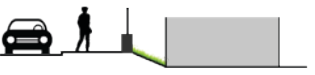
Flat Ground



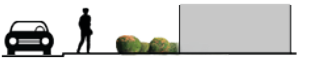
Slope Lawn



Down Slope



Retaining Wall/ Fence



Evergreen Shrub



## CHANCES FOR SPONTANEOUS PLAY

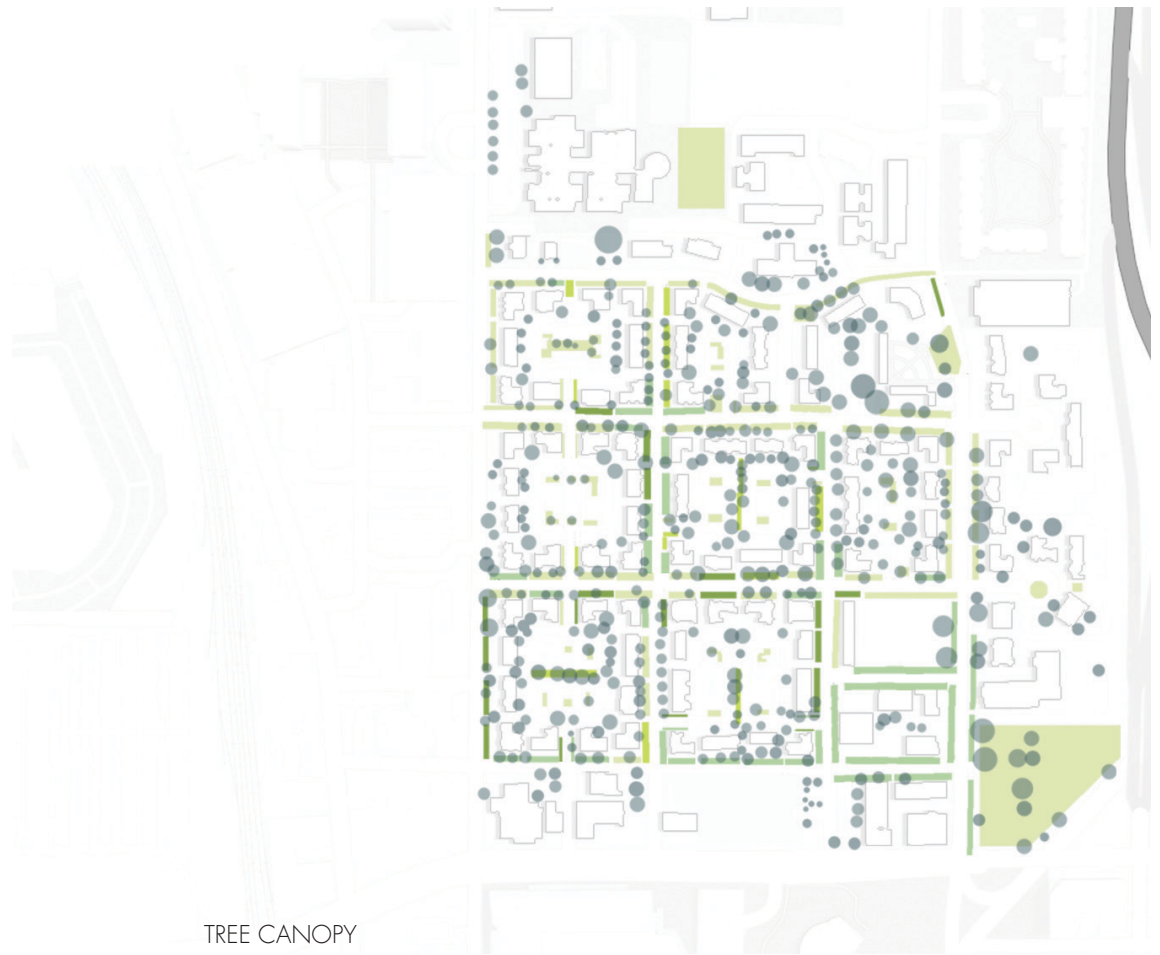


## UNDERSTANDING PLACE

The streets environment is different within the community. There are mainly five types of streets. Those types are defined by ground slope and surface vegetation. The five types are as follows: flat ground, slope lawn, down slope, retaining wall/fence and evergreen shrub. Each of them have different play opportunity. Street with the evergreen shrub has lowest opportunities for free play because of the limited space; the retaining wall provide highest chances for free play for its height and climbing features.



STREET TYPES



TREE CANOPY

## STRATEGIES OF MINIMIZING VEHICLE RISK

Since the community environment is of high speed traffic, those strategies are articulated to protect children from vehicle. Making those safety setting as a part of play feature, not just boring protecting things.



TRAFIC PATTERN



FENCE



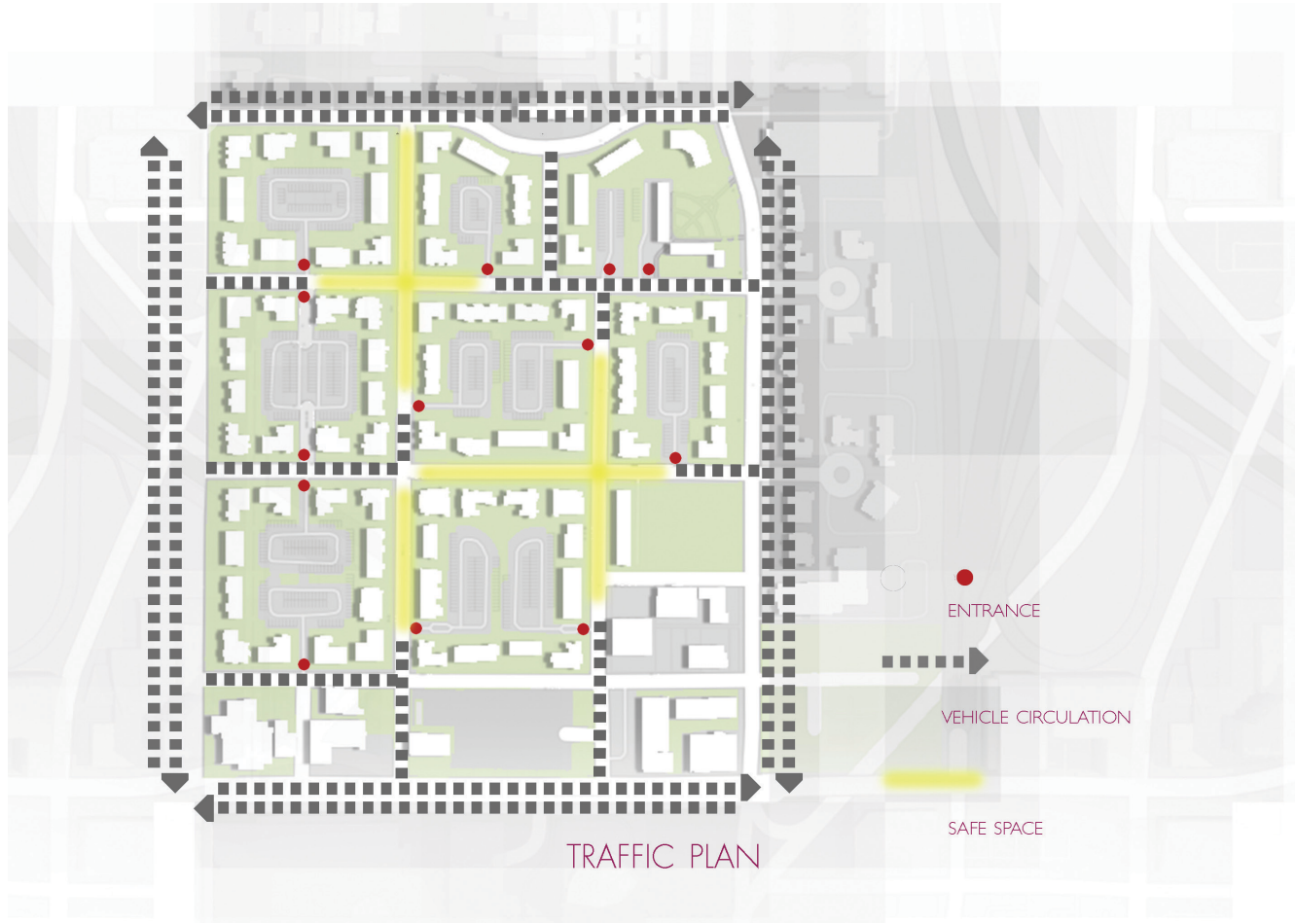
BOLLARD



BUMP



PAVING



### STRATEGIES OF MINIMIZING VEHICLE RISK

The premise of cultivating the culture of play within the community is to create a safe and harmony play environment. Considering the high speed traffic around the community, vehicle-free streets has been articulated in order to protect children from vehicle.







### DESIGN CONCEPT

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The design concept is to build an axis go through the whole community to attract residents and activate the whole community. Identified best experience could be reinvented into the community. Each of the four streets focuses on a main experience. So that the overall community is full of different opportunities and worth to discover.





Excitement



Gathering



Freedom



Achievement



Risk



Discovery



discovery



Freedom



Gathering



Company



Gathering



Excitement



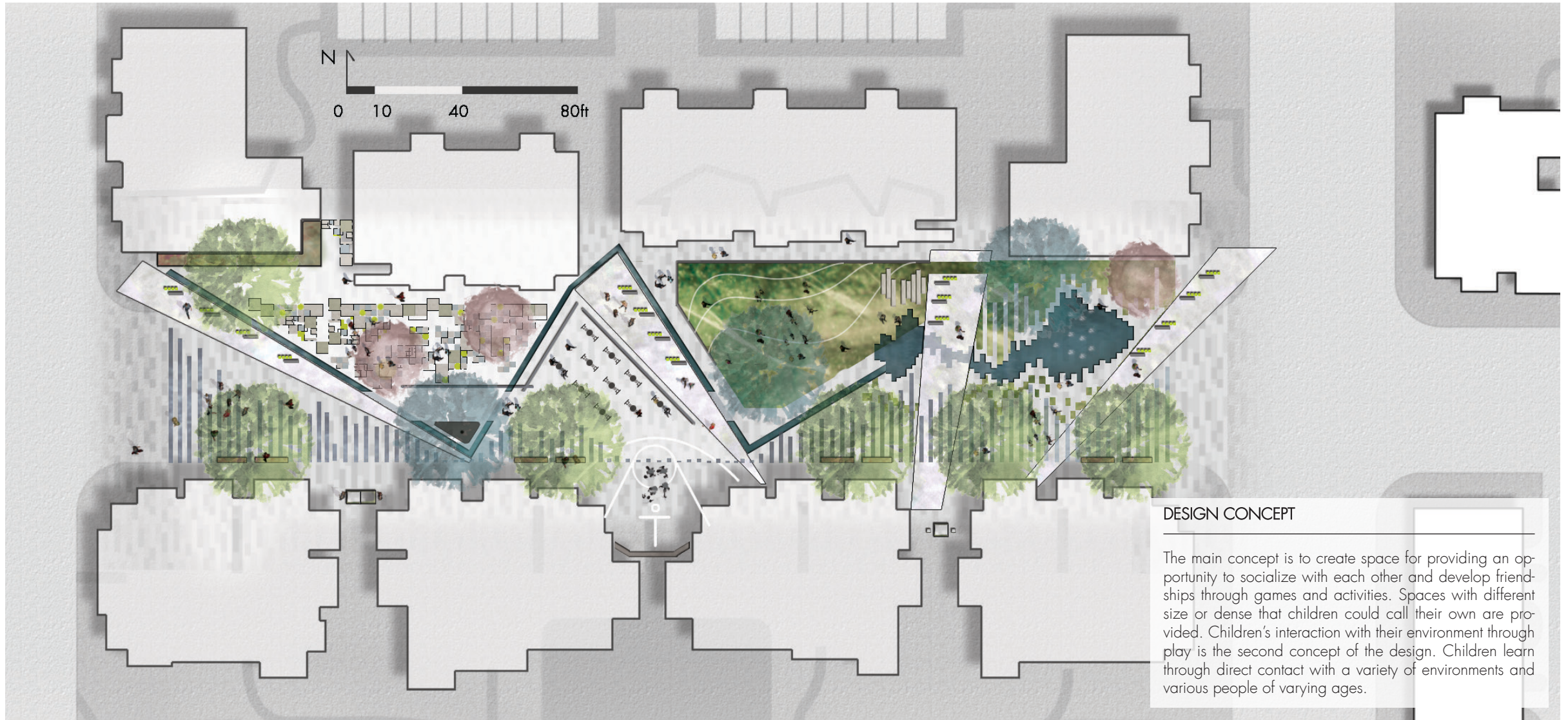


DESIGN CONCEPT

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A space that attracts people naturally is the basis to form a culture, not only attracts kids, but adults can also appreciate the space, all the range of ages people could participate in the site. For example, younger kids are more likely to have free games; teenagers more like sports; adults may like to social; the elder may like to exercise in the morning. Those activities that could happened in a neighborhood so that they could use the site at any time as they want.

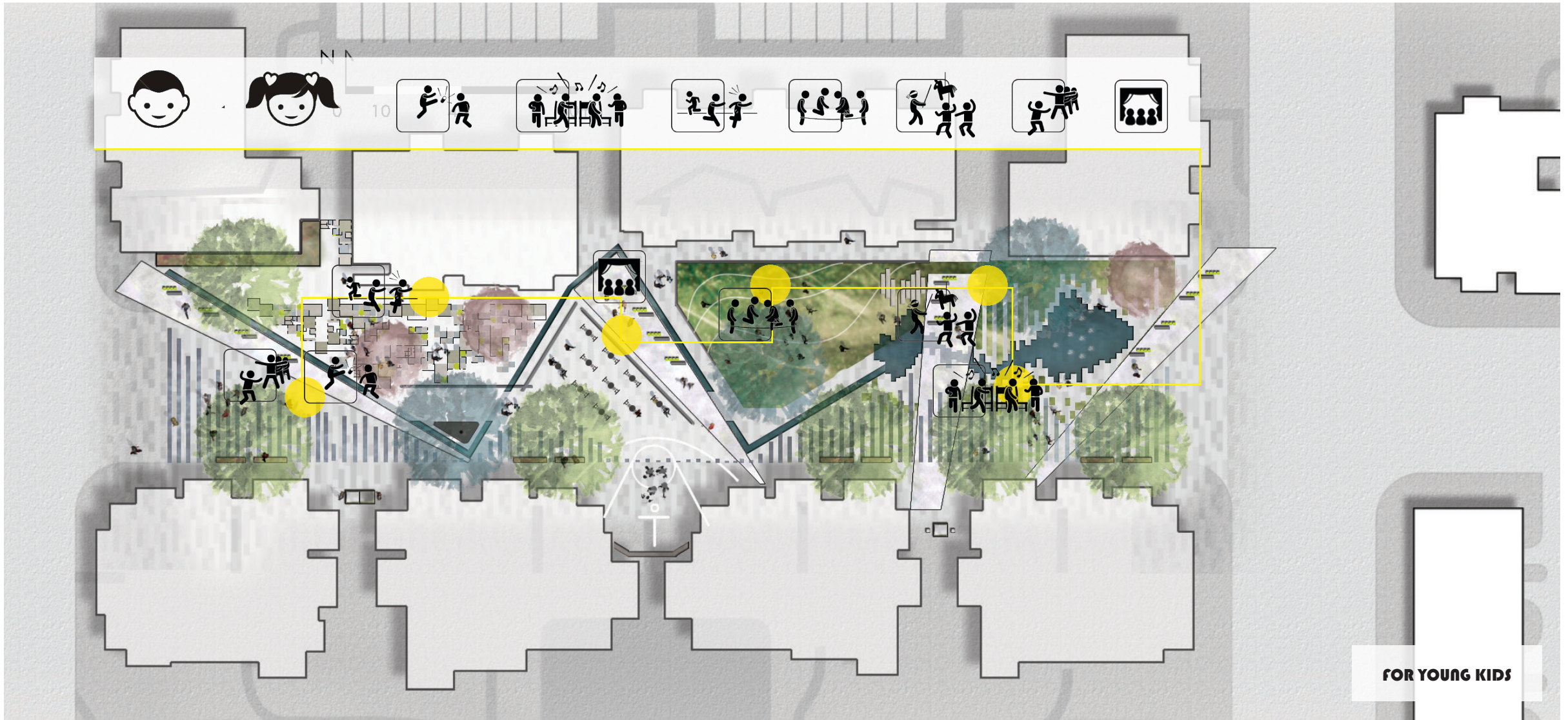




**DESIGN CONCEPT**

The main concept is to create space for providing an opportunity to socialize with each other and develop friendships through games and activities. Spaces with different size or dense that children could call their own are provided. Children's interaction with their environment through play is the second concept of the design. Children learn through direct contact with a variety of environments and various people of varying ages.



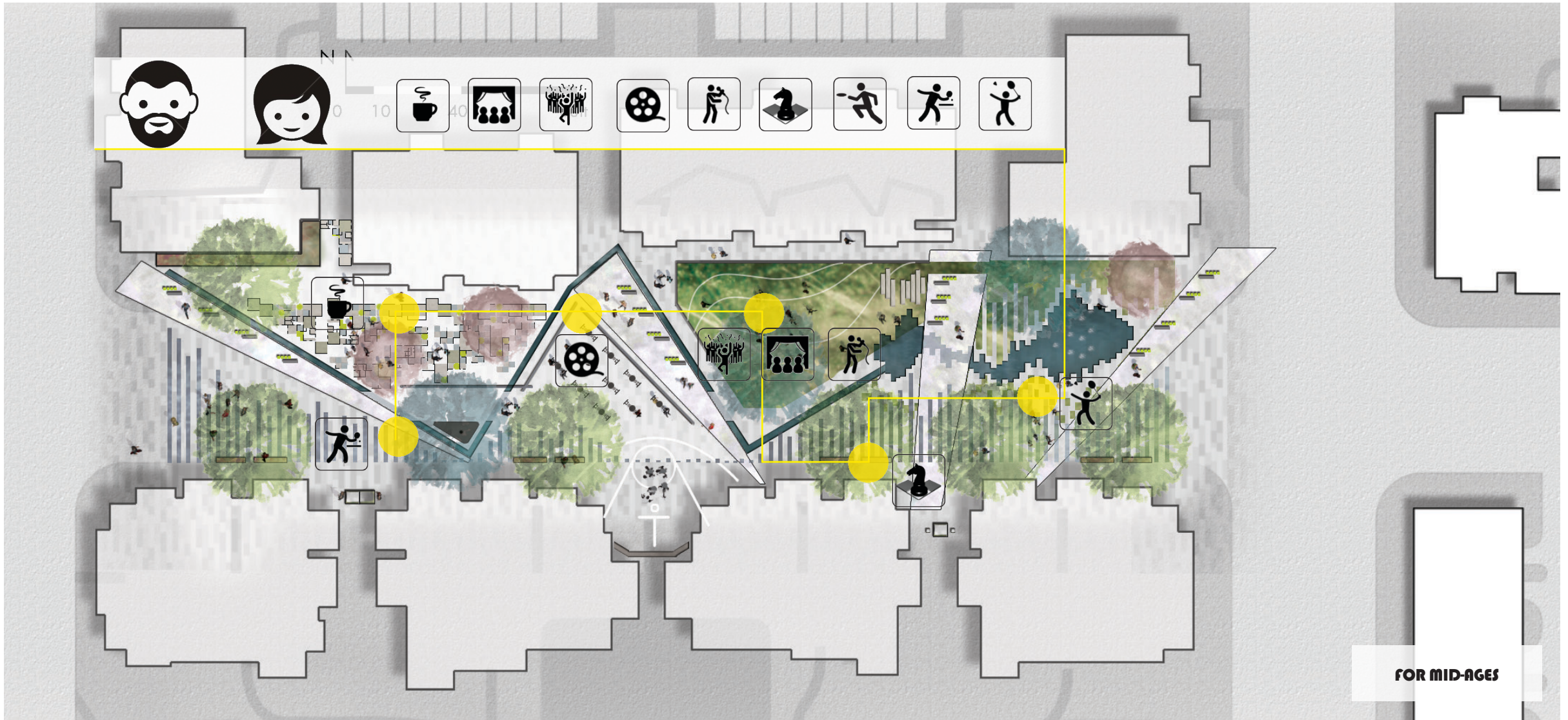


FOR YOUNG KIDS



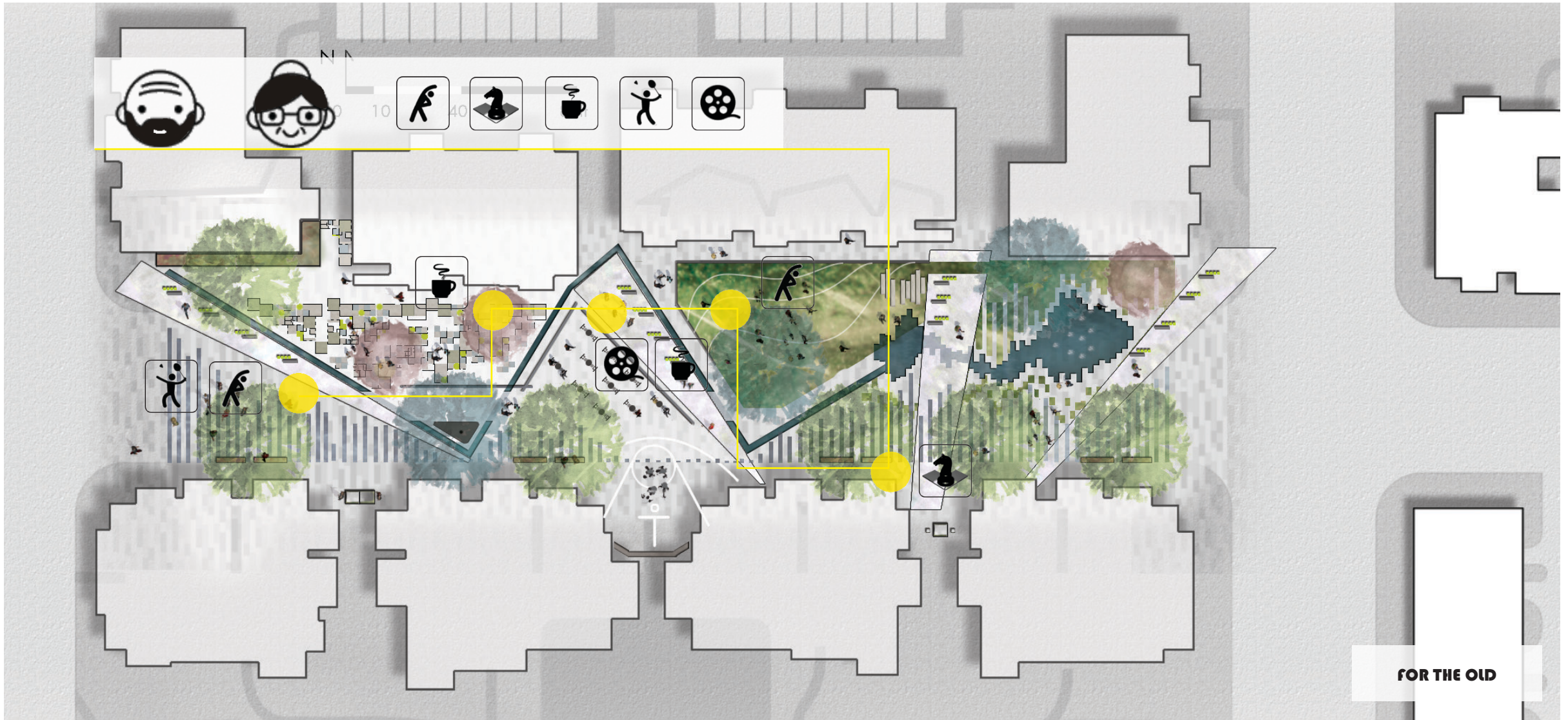






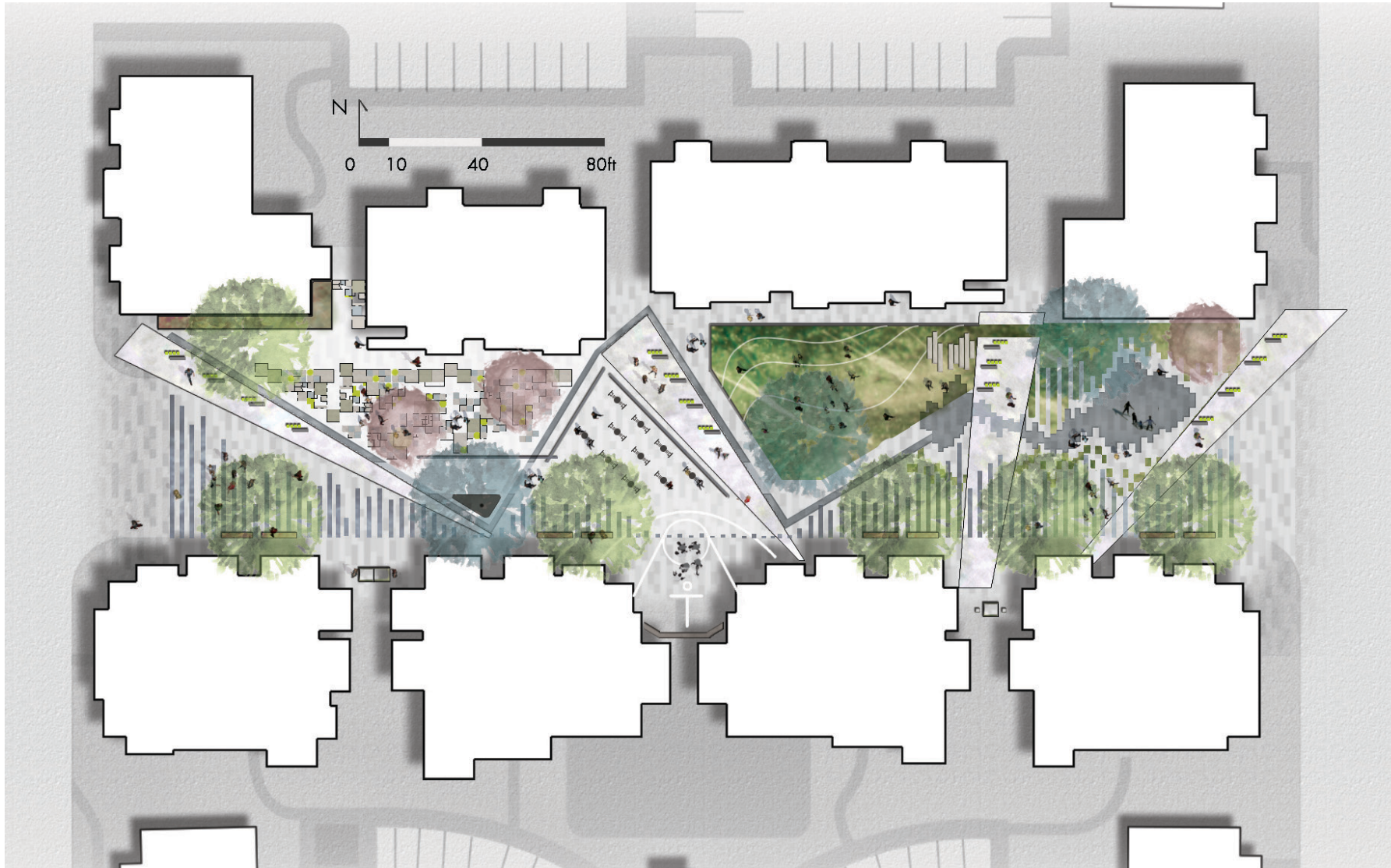
**FOR MID-AGES**





**FOR THE OLD**





## DESIGN CONCEPT

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The swale and fountain plaza would be dry in normal days. It only function as swale and ponds when there is a heavy rain. The dry swale would be a play element for kids and the plaza could be a place for activities like morning exercise for adults.









## MAZE - SPRING SCENE

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The maze consists of different materials of boxes as well as different plants. Those boxes could serve as seats, steps or planting beds. The maze is full of opportunities to let children to discover. They could play games like seek and hide, or just simply climbing the box. when they grown up, becoming taller, kids could be able to climb to higher points, and discover something new.





## MAZE - WINTER SCENE

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When the seasons change, the plants open a new opportunity for the maze, some area couldn't be go through in the summer may be go through in winter because the leaves fall. This environment allows children to contact with their environment, to make observation and to learn natural events like the change of the season. Since the environment is changing, it will continue to attract their attention over time.



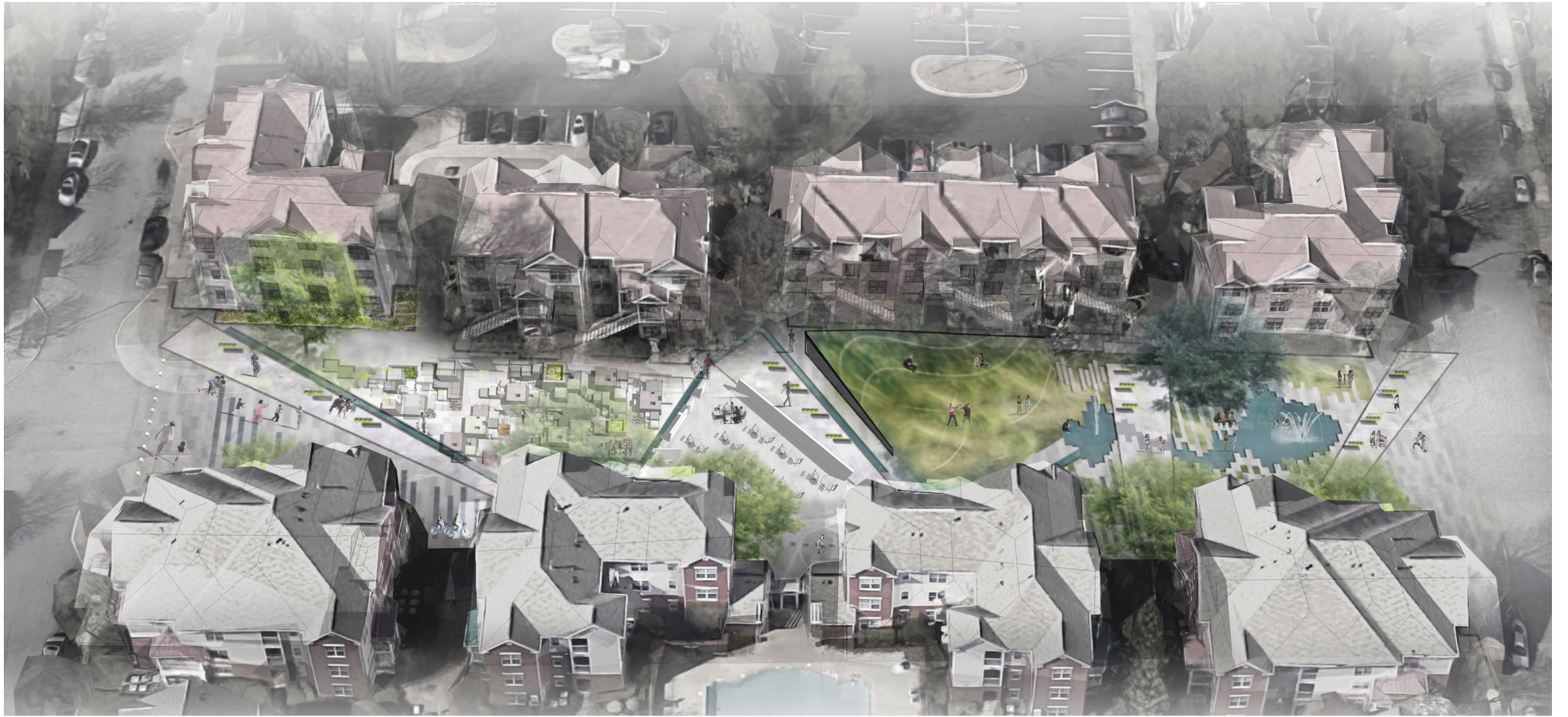


SUNSHINE LAWN & FOUNTAIN SQUARE

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The lawn and water feature presents the opportunity of being together with other children.





## **CONCLUSION**



The thesis design focuses on building a play network to articulate neighborhood culture of play in the area of community. This play neighborhood sets out to animate a previously disconnected outdoor space and create a neighborhood culture of play. A great number of play experience concluded from interview has been studied. Those experience are reinvented in to space through open and dynamic encounters with multiple materials and changing environment. People with all ages are encouraged to interact with the environment and with others by defining different activities in specific space through the site. The project investigations demonstrate that the space of all ages people participating in the space could provide safety and help to encourage a culture of play.

Children's preferences and expectations on play may vary according to the individual, the society and the culture. Few children participated in this study sample, future study can involve a more integrated data base, including children themselves in order to collect the play experience. Also, direct observation on children could be an another useful tool to explore play activities and experience. The future exploration can also set the play neighborhood into the scope of city to build a larger network connecting to city park system.

Finally, "a child's play space should ideally never be finished, it should be in a constant state of change" (Goltsman1994).

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## **ACKNOWLEDGEMENT**

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Thank you to David Hill and Kelly Homan for their endless encouragement and pushing me to be better throughout the years on this project. Thank you to Charlene Lebleu for her warmest help, for being my advisor and for her timeless effort in getting this program.

Thank you to all fellow students and faculty for experiencing this journey with me and constant source of inspiration. Thank you to all my friends and family who have offered their encouragement and support along the way.

A very special Thank You to my parents and Zehua Huang for their love, support and believing.