REDESIGN OF A DEMOLISHED NEIGHBORHOOD:
CREATING A HEALTHY, SAFE AND SOCIABLE CABRINI GREEN
IN CHICAGO

BY

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THESIS

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ABSTRACT

In this thesis, I propose a redesign of a newly demolished public housing project located at the north end of Cabrini Green neighborhood in Chicago. It is the former “William Green Homes”, notorious for crimes, physical deterioration, and social isolation, but also home for many hundreds of people over the years. In accordance with HUD’s Hope VI program, my proposed redesign focuses on the public health, neighborhood safety, and sociability. Inspired by New Urbanism precedents and based upon literature on affordable housing planning and design and observation, site analysis, HOPE VI survey, this thesis proposes specific planning and design interventions for Cabrini Green neighborhood. The thesis also suggests ways to apply environment and behavior research to the practice of landscape architecture in the context of a specific neighborhood in Chicago.

It has three major sections: Introduction and Literature Review (Chapter 1 and 2), cover background information of Cabrini Green and review of literature on housing; Site Study and Precedents & Recommendations (Chapter 3 and 4), contain site inventory and analysis, summary of HOPE VI survey findings, and resources from Chicago Housing Authority; Schematic Proposals and Final Plan (Chapter 5 and 6), illustrate three alternatives plans and the synthesized illustrative plan and detail designs. The thesis concludes with thoughts of applying Cabrini Green redesign to similar situations elsewhere.

**Keywords** Cabrini Green; Public Housing; Health; Safety; Sociability
I must thank most especially my committee chair Prof. Amita Sinha, who not only showed a consistent interest in my project since the beginning, but also provided references and all kinds of help with developing design solutions and producing the document. Her insightful and constructive comments have greatly improved my work.

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We remain physical creatures, inherently embodied, inextricably situated, resolutely sensitive to proximity, and the weakest and most vulnerable among us remain the most spatially dependent of all.

(David Fleming, 2008, p. 15)

Figure 1.1 Location of Cabrini Green (Xinxin Chai, 2011, Adapted from GIS Portal)
1.1 CABRINI GREEN

Cabrini Green is a large inner-city public housing development owned and operated by Chicago Housing Authority (CHA) during early 20th century on Chicago’s Near North Side (CHA, 2009). The development expanded several times and was composed of 3,600 units housing 15,000 people within three development areas (Fig. 1.1, 1.2), bordered by Scott Street on the north, Chicago Ave on the south, Sedgwick Street on the east, and Halsted Street on the west (Fleming, 2008). Notorious for crimes, gangs, drugs, deteriorated physical conditions and social isolation, Cabrini Green has been undergoing demolition and new development under the charge of the CHA and the United States Department of Housing and Urban Development (HUD) since the 1990s (CHA, 2009). As of the end of 2004, “land surrounding Cabrini had been developed and a number of small mixed-income developments had been built”. However “some of the high-rises still stood.” (Miller, 2008, p. 945)

Cabrini Green was initially built upon the site of a Italian-American slum known as Little Hell at Near North Side of the City of Chicago in the early 1900s (Miller, 2008, p. 949). More African Americans settled here when the “Great Migration” from the South to “Lower North” happened during and after World War I and II thus consequently made its population nearly entire African Americans by 1962 (Fleming, 2008). And Cabrini Green finally became home to several
thousand poor, mostly female-headed, African-American families by the end of the 20th century (Fleming, 2008). Frances Cabrini, the earliest section, was constructed under the charge of the CHA on 16 acres of cleared land in the heart of Little Hell in 1942 (Fig.1.1.1). It was laid out “barracks style and comprised of forty-five 2 and 3-story red brick row houses with 586 units of subsidized housing” (Fleming, 2008, p. 3). In 1958, the CHA constructed Cabrini Extension on “35 acres of land right across the street from the Cabrini row houses” under the Urban Renewal program. The extensions consisted of fifteen 7, 10 and 19 story red brick high-rise buildings with 1,925 units of public housing (the “Reds”) (Fleming, 2008, p. 5). Then the CHA built William Green Homes in 1962 comprising 1,096 housing units within eight 15 and 16 story exposed concrete high-rise buildings (the “Whites”) on 19 acres northwest to the Cabrini Extension (Fleming 2008, 5). Table 1.1 shows the details of three sections (Arthur Young & Co., 1978). Thus the three projects of Cabrini Green interpreted the concept of “Transitional Housing” on “scattered sites” for low-income families, which once was seen as a good solution in US but “eventually evolved into the isolated islands of poverty and crime widely associated with public housing” (CHA, 2009).

Table 1.1 Three Sections of Cabrini Green

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
<th>SIZE</th>
<th>FEATURE</th>
<th>REDEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frances Cabrini Row Houses</td>
<td>1942</td>
<td>16 acres</td>
<td>Barracks style layout; 45 row houses; 586 units; 2- and 3-story; Red bricks</td>
<td>Retained and Renovation</td>
</tr>
<tr>
<td>Cabrini Extension (North and South)</td>
<td>1958</td>
<td>35 acres</td>
<td>15 high-rises; 1,925 units; 7-, 10- and 19-story; Red bricks</td>
<td>Demolished and Redevelopment</td>
</tr>
<tr>
<td>William Green Homes</td>
<td>1962</td>
<td>19 acres</td>
<td>8 high-rises; 1,096 units; 15- and 16-story Exposed concrete</td>
<td>Incompletely Demolished</td>
</tr>
</tbody>
</table>
Due to severe problems of poverty, organized crime, gang violence and deteriorating physical condition, Cabrini Green’s gallery style buildings faced demolition over several decades as a part of the nationwide plan to end high-rise public housing in US. Since late 1980s, ambitious plans have been developed to demolish Cabrini Green high-rises and replace with mixed-income neighborhoods (CHA, 2009). In June 1996, the Near North Redevelopment Initiative (NNRI) was unveiled calling for new development on and around the Cabrini Green (Fleming, 2008, p. 9). In early 2000, through the grant money from HOPE VI program of HUD, the CHA began the “Plan for Transformation”, a ten-year plan to turn isolated low-income public housing developments into healthy, and mixed-income communities by “partnering with market-rate and affordable housing developers” (CHA, 2009). The redevelopment proposal representing the principles of New Urbanism was the winner from 300 entries of the Chicago Tribune international competition (Summer 1992). It was the work of two assistant professors of urban design, Jim Nelson and Don Faulkner at North Dakota State University in Fargo (Rybczynski, 1993).

1.2 WILLIAM GREEN HOMES

The subject site is located at the north-end part of Cabrini Green areas in Chicago, the previous “William Green Homes” (Fig.1. 3), bordered by Ogden Avenue, Clybourn Avenue, Cleveland Avenue, Division Street, and Halsted Street. “William Green Homes”, also called “White Walls”, once had eight gallery style buildings on the sites: 1230 N. Buling, 714 W. Division, 660 W. Division, 624 W. Division, 534 W. Division, 1230 N. Larrabee, 1340 N. Larrabee, and 630 W. Evergreen. By 2010, there remain three groups of 16 story high-rises on the site which still accommodate residents.
According to Miller (2008), the remaining residents here once gained the opportunity to directly manage building life and even tried to buy their buildings from the city in 1990s (p. 955).

Especially, the residents at 1230 N. Burling became a Resident Management Corporation (RMC) making efforts to “provide job training, employment opportunities, apartment renovation, resident security training, after-school tutoring, and other services to building residents” (p. 955-956). However, due to failure to enact some policies, the RMCs management contracts at eight Cabrini-Green buildings were cancelled by the CHA in June 2003. The “CHA head Terry Peterson reiterated his claim that all 25,000 lease-compliant CHA families would be provided housing as buildings were demolished” (p. 956) Thus, the process of the redevelopment at William Green is not complete yet.
When I visited the site in 2009, the remaining buildings give me the impression of “super blocks” standing abruptly on empty ground. The white concrete buildings have sixteen stories with large window areas and little walls. They have ribbon windows for each room. They have no decorated elements on the exterior except for several fire-damaged spots. The wires covering the exposed public galleries make the entire building look shabby. Many rooms face east and west without air-conditioning. Many rooms are vacant with broken windows. There are a few trees on the site but most area is grassy and not landscaped. The entire site is mostly fenced. There are two children’s playgrounds in the open area and two elementary schools, Friedrich Von Schiller Public School and Sojourner Truth Elementary School on the north. Two policemen were seen guarding one of the buildings at the main entrance. However, the residents there still try hard to maintain the normal social life in the buildings, for example, there were some families BBQing, sitting together and chatting on the galleries. The parking lots, sidewalks and infrastructure show lack of maintenance. More than ten bus stops are closely located on Division Street and Halsted Street. Subway Red Line, Purple Line and Brown Line are also close to this area. One gas station, a few restaurants and convenient stores are located to the west.

### 1.3 HOPE VI: REDEVELOPMENT

HOPE VI program, the major plan of HUD, has successfully helped to demolish 42 of the 51 public housing high-rises in Chicago by the end of 2002 and to redevelop these areas including Cabrini Green (Miller, 2008, p. 945). It aims to revitalize failed public housing projects with mixed-income developments based on the principles of New Urbanism and the concept of “defensible space” (HUD, 2009). HOPE VI advocates dense, pedestrian-friendly, and transit-accessible communities consisting of low-rise private houses, duplexes, and row houses. It
emphasizes the importance of health, security, social networking, street interaction, and urban integration of the neighborhood, as well as resident pride (HUD, 2009).

According to this philosophy, the redevelopment planning for Cabrini Extension North was started in 1994, covering 18.4 acre areas with around 700 public housing units on the current Cabrini Extension North site and in Cabrini Near North Developments. Of that, Cabrini Near North Developments also include a few of developments such as North Town Village, Old Town Square, Mohawk North, Mohawk Infill and Orchard Park Townhomes (CHA, 2003, p. 16).

Redevelopment of Cabrini Green is taking place in several on- and off-site phases (except for Frances Cabrini Row-houses preserved for renovation) (Fig.1.4): Cabrini Extension North (on-site), North Town Village (off-site), Old Town Square (off-site), Renaissance North (off-site), and Orchard Park Townhomes (off-site) (CHA, 2001, p. 26-27). Of that, Cabrini Extension North site redevelopment is a part of NNRI; Old Town Square new development close to Chicago’s downtown area began.

Figure 1.4 Redevelopment of Cabrini Green (Xinxin Chai, 2009)
in 1998 and was completed in 2001 by MCL Companies; Renaissance North development is built on North Avenue by the developer Renaissance Company; Orchard Park Townhomes is developed by the Chicago Metropolitan Housing Development Corporation on North Clybourn; North Town Village is built on North Avenue and Halsted Street by Kenard Development (CHA, 2009; CHA, 2002, p. 16-17). Of the total units, 42% are for very low-income families; 25% for low-income families; 33% for market-rate rent; 34% for public housing residents. As well, amenities are provided including “a community center, rooftop exercise room, on-site laundry facilities, bike and tenant storage rooms and 102 indoor parking spaces” (AFL-CIO, 2009). Table 1.2 shows the details of the redevelopment.

Table 1.2 Details of Redevelopment of Cabrini Green

<table>
<thead>
<tr>
<th>NAME</th>
<th>SITE</th>
<th>UNITS</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frances Cabrini Row Houses</td>
<td>On-site</td>
<td>586</td>
<td>Preserved for renovation</td>
</tr>
<tr>
<td>Cabrini Extension North</td>
<td>On-site</td>
<td>718</td>
<td>215 public housing units, 144 affordable units, 359 market rate units</td>
</tr>
<tr>
<td>North Town Village</td>
<td>Off-site</td>
<td>261</td>
<td>110 very low-income units; 65 low-income units; 86 market-rate units; 89 public housing units</td>
</tr>
<tr>
<td>Old Town Square</td>
<td>Off-site</td>
<td>113</td>
<td>16 units for CHA residents</td>
</tr>
<tr>
<td>Renaissance North</td>
<td>Off-site</td>
<td>59</td>
<td>18 public housing units</td>
</tr>
<tr>
<td>Orchard Park Townhomes</td>
<td>Off-site</td>
<td>54</td>
<td>13 units for CHA residents</td>
</tr>
</tbody>
</table>

However, the process of redevelopment at Cabrini-Green is incomplete yet. As of the time I observed in July 2009, there are still three 16 story high-rises remaining at the site of previous “William Green Homes”, the north end of Cabrini Green areas.

Two redevelopments provide a good context of William Green Homes: North Town Village on the north and Parkside of Old Town on the south. They both provide the subject site with good
surrounding city fabric and planning/design references and ideas. There is a mixture of Italianate, Renaissance, and Modern style architecture in North Town Village and Parkside of Old Town. The variety of low-rise townhouses, coach houses, and 6-8 storied flat unit buildings makes the neighborhoods compatible with the housing styles of nearby Old Town and Lincoln Park. The building exteriors are of light and dark brick masonry and Renaissance stone decorated by the exposed balconies. The ornamental iron fencing, landscaped front yards with easements and the effective street infrastructure all make for visually pleasing neighborhoods and age well.

1.4 DESIGN GOALS

The thesis explores a comprehensive approach to sustainable community redevelopment on a site at Near North Side of Chicago. The redesign principles address health, safety, sociability objectives. Cabrini Green serves as a case study to redesign demolished public housing neighborhoods, as well as the precedent for similar situations elsewhere, such as Madden Park Homes, and Rockwell Gardens in Chicago. This thesis will examine how social issues such as public health, neighborhood safety and social interactions influence the planning and design of public housing neighborhoods. The main objective of my design is to redevelop the subject site into a healthy, safe, and socially supportive neighborhood which is also compatible with the existing urban fabric. My redesign of the remaining Cabrini-Green neighborhood focuses on the following three major aspects— **Health, Safety, and Sociability.**

The Challenge of Creating a Healthy Place

Witold Rybczynski, in his article *Bauhaus Blunders* (1993), mentioned the undesirable physical condition of Cabrini-Green neighborhood, “It was not only the bleak expanses of grassed public spaces rather than streets, and the lack of
private gardens” that struck him, “but also the sight of tall, institutional-looking apartment blocks rather than of neighborhood streets lined with single-family houses.” First of all, there were negative impacts on residents’ daily life from the architectural design: no private balconies or terraces were provided; access galleries and elevator lobbies were left open despite Chicago’s frigid winter; the unshaded apartment windows faced east and west with no air-conditioning (Rybczynski, 1993). Moreover, the overall layout “dispensed with the familiar street and supplanted it with parkland with little landscaping that quickly disappeared and was replaced by beaten dirt and asphalt parking lots” (Rybczynski, 1993). Similarly, the open pedestrian spaces were “windy, unappealing, and more crime-prone than conventional streets and sidewalks overlooked by individual homes” (Rybczynski, 1993). Finally, without proper maintenance, the high-rises suffered physical deterioration: “elevators broke down, staircases became garbage dumps, roofs leaked, and broken windows remained unreplaced”, “the lobbies and corridors were vandalized”, “children roamed unsupervised sixteen floors below”. In such circumstances, Cabrini Green hardly provided a healthy and safe living environment for residents.

The Challenge of Creating a Safe Place Both residents and nonresidents of the development had perceived an unsafe and insecure environment at Cabrini Green since the early 1970’s, which was infamous for the sniper murder of two Chicago police officers in 1970 (Arthur Young & Co., 1978) and the senseless fatal shooting of a seven-year-old boy in 1992 (Rybczynski, 1993). To demonstrate a commitment to making the complex safer, Chicago Mayor Jane Byrne, backed by police officers and a personal bodyguard, once moved into a fourth-floor apartment there in 1981. Unfortunately she stayed for only three weeks. A lot of efforts have been made to make
Cabrini Green safer through practical techniques, such as “security checks, supervision of apartment lobbies, better maintenance, better responsiveness to tenants, better policing, more thorough screening of prospective tenants” (Rybczynski, 1993). As well, the Cabrini-Green High Impact Program (HIP) was planned and implemented by a consortium of City agencies, aiming to “reduce the incidence and fear of crime and to improve the residential desirability of the neighborhood” (Arthur Young & Co., 1978). Based on an "environmental design" approach to security planning, the HIP implemented a “hardware strategy” and “software strategy” to alter the features of the residential environment which foster crime and fear of crime. The former involved “an architectural and electronic security program and a courtyard fencing program”. And the latter intended to provide “resident patrols, social services, and security education” to residents” (Arthur Young & Co., 1978). They did not address the role of landscape design improving the neighborhood safety.

The Challenge of Creating a Sociable Place “The segregated housing situation in Chicago reached a crisis point during the 1960s” (Miller, 2008, p. 946). David Fleming’s City of Rhetoric (2008), referred the sociologist Harvey Zorbaugh’s description of Near North Side of Chicago, “The isolation of the populations crowded together within these few hundred blocks, the superficiality and externality of their contacts, the social distances that separate them… the inevitable result is cultural disorganization” (p. 2) The same situation was with Cabrini Green and “the stated motivation for tearing down the high-rises and moving residents to neighborhoods is to reduce their social and economic isolation” (Miller, 2008, p. 956). “(I)t’s obvious that large islands of high-rise apartment blocks that contribute to social isolation are a
problem” (Rybczynski, 1993). Since the early 1990s, HUD has emphasized the construction of mixed-income housing neighborhoods intending to help reduce the isolation of low-income public housing residents. (Miller, 2008, p. 949) However, architecture is less of a problem than it is believed to be. Actually, Cabrini Green residents used to keep good social relations with each other and many remaining residents still showed strong emotional connections with their neighborhoods. When I visited, a lot of people were sitting, chatting, and making BBQ with families and friends and children were playing and running on the building galleries. As David Fleming mentioned in his City of Rhetoric (2008), “(T) here are many lower middle-class families who stayed even when their fortunes rose, wanting to remain close to friends, church, public transportation, and the cultural vibrancy of a large city” (p. 6). Therefore the new planning and design efforts should bring the neighborhood more chances to be physically and socially integrated into the surrounding city.
Are there places where I personally could not live? Yes, indeed, there must be such environments for all of us. For me it is the two extremes of density: low-density suburbia, which I find lacking in street life and public outdoor activity and too dependent on the car, and high-density high rises, which I find unacceptable for my children and too vertically divorced from garden space and urban activity for myself.

*(Clare Cooper Marcus, 1986, p. viii)*

### 2.1 PUBLIC HEALTH

Public Health is the social goal of communities. *Urban Sprawl and Public Health*, by Frumkin, Frank and Jackson (2004), offers a comprehensive look at the interface of urban planning, community design, and public health. It summarizes the evidence linking adverse health outcomes with urban sprawling development, such as air/water quality, physical/mental health, injuries/deaths from traffic, and social capital. It also outlines the complex challenges of developing policy that promotes and protects public health of cities and communities, which is characterized by “health-enhancing places” and “smart growth” (Frumkin et al., 2004, p. 204). For example, “Frederick Law Olmsted was advancing design principles such as low-density urban and suburban neighborhoods, large and small parks, and tree-lined boulevards and promenades, all thought to be healthy alternatives to overcrowded cities” (Frumkin, *et al.*, 2004, p. 203). Also there are ten smart growth principles advocated by the organization of Smart Growth Network, including mix land uses, compact building design, walkable neighborhoods, attractive communities with a strong sense of place, etc. As well, in Ewing and Kreutzer’s report *Understanding the Relationship between Public Health and Built Environment*, the authors discuss the crucial role of the neighborhood environment and the social interaction on resident’s
physical and psychological health (Ewing and Kreutzer, 2006, p. 90). The report points out the key elements to design the health-promoted community: land use patterns, street connectivity, transit access, safety, parking, streetscape, pedestrian amenities, etc. as well as the concerns over special populations including women, children, the elderly, low-income groups, and people with disabilities. It also presents health benefits from social activities, such as the prolonged life, better health overall, good cardiovascular health, faster recovery from illness, and improved mental health. (Ewing and Kreutzer, 2006, p. 90-91).

Features of Public Open Spaces And Physical Activity Among Children (Timperio et al., 2008) is a more recent study aiming to examine associations between features of public open spaces and children’s physical activities. It highlights age group and gender concerns when dealing with the playground planning and design. Thus by creating different spatial characteristics to cater different children groups is a key reason for public spaces to function well in the short and long run. Public Parks And Physical Activity Among Adolescent Girls (2006), by Cohen et al, presents the results of a study examining the association between park proximity, park type, and park features and physical activity. The study has influenced my detail designs of the neighborhood park in proximity to homes to encourage physical activities; providing the park with playgrounds, basketball courts, walking paths, swimming areas, tracks, picnic areas, streetlights, floodlights, shaded areas, and drinking fountains to increase chances of physical activities; providing spaces for vigorous activities in parks for males. (p. e1386-e1389).

Design Implication of Health:

The concept involves main idea of Neo-traditional neighborhood development (Table 2.1).
## Table 2.1 Design Implication of Health

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density and Form</td>
<td>• create mixed land use pattern and medium density neighborhoods to guarantee the neighborhood social life and access to nearby commercial, recreational, food, and green spaces</td>
</tr>
</tbody>
</table>
| Circulation            | • create grid street connectivity to increase street crosses and meeting chances among people  
                          | • narrow roadways to reduce the speed and volume of traffic and create agreeable street scale for pedestrian  
                          | • increase public transit access to provide people with a variety of transportation choices |
| Dwelling               | • design compact building form to achieve energy efficiency  
                          | • cluster housing units for families, especially single-parent families, so that facilities have shared child care, common playrooms  
                          | • locate living room and/or kitchen windows to permit good views |
| Pedestrian             | • put sidewalks along streets to encourage people walking  
                          | • put crosswalk and markings at proper locations to ensure pedestrian safety  
                          | • design sidewalk activities, such as creating spaces where adults meeting casually on the street can stop and chat; creating sidewalk elements that children can touch, smell, climb on, sit on, jump from, hide behind, etc.  
                          | • design pedestrian/bicycle amenities for pleasing pedestrian environment |
| Open Space             | • design scaled/sized parks and tree-lined boulevards/ promenades to provide people with outdoor greenery system  
                          | • put recreational facilities and open spaces close to residential buildings to encourage people to do outdoor exercises  
                          | • locate basketball courts for teenagers within sight and calling distance of a play area that can accommodate a wide age range of younger children  
                          | • design a variety of play spaces for children to support yard play, balcony play, doorstep play, sand play, water play, equipment play and children’s garden  
                          | • provide play equipment for a variety of experiences: facilities for climbing, swing, jumping, and sliding; opportunities for digging in and manipulating the environment; peripheral places for quiet contemplation, rest, or fantasy |
| Parking                | • plan on-street parking to decelerate vehicle speed and increase people meeting chances |
| Public Service         | • encourage the employment of a core of fulltime maintenance personnel for trees, shrubs and grassed play areas |
2.2 NEIGHBORHOOD SAFETY

Neighborhood safety is one of the qualities of good neighborhoods, which is “(a) place where residents feel safe and secure” (Brower, 1996, p. 101). Oscar Newman’s *Defensible Space*, is the most significant study on lack of safety in urban high-rises of public housing projects. The book deals with the crime-control effects of the physical layout of the residential environment. At the beginning of the book, Newman develops the concept of “Defensible Space”, which is “a model for residential environments which inhibits crime by creating the physical expression of a social fabric that defends itself” (Newman, 1973). It is the mechanisms that combine to bring an environment under the control of its residents, which include real and symbolic barriers, strongly defined areas of influence, and improved opportunities for surveillance (Newman, 1973).

“Territoriality” is another concept that Newman considered as basic to security design. It is the “capacity of the physical environment to create perceived zones of territorial influence”, which “defines private area barriers and prevents strangers from invading into the personal territories” (Newman, 1973, p. 50). Although there is controversy about his definition, his idea of using “territorial zone” to define private and public realms is definitely workable and useful even for today’s neighborhood safety design. On the other hand, Taylor, Gottfredson and Brower explained in *Block Crime and Fear*, that local social ties can “enhance territorial responsibility for near-home spaces and neighborhood identification” (Taylor, *et al.*, 1984). Social interactions among residents significantly “strengthen territorial functioning” of the neighborhood and thus reduce crime-related outcomes in neighborhood public life (Taylor, *et al.*, 1984). Moreover, the surveillance of other people and the familiarity with others can also dampen the fear and the crime (Merry, 1981, p. 28).
Based on Newman’s original theoretical model and the subsequent theoretical and empirical developments, Reynald and Elffers in their article *The future of Newman’s defensible space theory (2009)* highlight the evolution of defensible space theory and emphasize the role that routine activities of place have on the crime-prevention and crime-related problems. Reynald and Elffers present an instructive discussion on the key components of Newman’s defensible space theoretical framework including territoriality, natural surveillance and image/milieu, as well as the conceptual critiques from Mayhew and Merry and conflicting empirical findings from Taylor, Perkins and Booth et al. They strongly emphasize the ambiguity of the territoriality mechanisms at consistent spatial units and the lack of social and psychological concerns for shaping territorial functioning and crime-prevention. They re-conceptualize territoriality in terms of social behavior and self concept to achieve a strong sense of community with social cohesion. They emphasize the social potential of informal residential control in order to strengthen social ties.

The two important points Reynald and Elffers come up with as the future of defensible space theory are the accessibility and routine activities of place, both of which significant in my project focus— open public spaces and thus use. Since an area’s accessibility affects residents’ ability to exercise territorial control over their space, authors insist that more efforts should be put on the definition and measurement of accessibility in future empirical studies. For example, one view is, “the more accessible an area is, the greater the opportunity for outsiders to utilize the space; the more outsiders who use the space, the more ripe the opportunity for victimization” and “may have a negative effect on the natural surveillance provided by residents and… on their ability to
exercise control over their environment” (p. 38). It can also be argued that “the natural surveillance is provided not only internally by residents but also externally by all users of space” and “the presence of strangers as the critical source of surveillance rather than residents” so “the street accessibility actually reinforces natural surveillance” (p. 38). The routine activities as the social behavior at a particular place are affected by the accessibility of the place. And they in turn affect the efficacy of guardianship and have a direct effect on the creation of secure environments. Reynald and Elffers thus suggest the further articulation of the concept of defensible space with physical accessibility to and social behavior in places.

**Design Implication of Safety:**

The concept involves blocking crime and fear of crime through environmental design and supporting routine everyday activities of places where people are such as work, school, and home (Table 2.2).

Table 2.2 Design Implication of Safety

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space Hierarchy</td>
<td>• provide a series of transitional zones for pedestrians passing from public spaces to the private domain of the dwelling, such as setback, front porch, front/back yard, pocket park, courtyard, etc.</td>
</tr>
<tr>
<td></td>
<td>• define the hierarchy of privacy for territorial zones: private, semiprivate, semipublic and public realms, which include grounds, play spaces, walkways, parking areas, building entries, lobbies, elevators, stairways, hallways, and commons</td>
</tr>
<tr>
<td></td>
<td>• ensure that there are convenient and comfortable places to sit in semiprivate areas</td>
</tr>
<tr>
<td>Density and Form</td>
<td>• subdivide the site into clusters so that residents learn to recognize each other and can spot nonresidents</td>
</tr>
<tr>
<td></td>
<td>• limit the access and visibility of personal properties to avoid inspiring the motivation of the offender</td>
</tr>
</tbody>
</table>
Table 2.2 (cont.)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territoriality</td>
<td>• create real and symbolic barriers of public spaces to form clearly defined territorial boundaries of spaces and facilities, such as solid fencing or a mixture of encing types to permit views out but limit visual access to dwellings and private open spaces</td>
</tr>
</tbody>
</table>
| Surveillance        | • improve opportunities for surveillance to ensure eyes on public spaces all the time  
• enhance territorial responsibility for public spaces adjacent to home to improve surveillance, such as locating windows so that surveillance of semipublic open spaces and footpaths is possible from frequently used rooms  
• use soft edge such as yards and outdoor sittings to form the transitional space between private spaces and public spaces to encourage routine activities and increase the chance of surveillance |
| Community Identity  | • ensure some degree of homogeneity within the community especially by age or life-style, so that residents feel a sense of cohesion  
• strengthen local social ties among neighbors to form the sense of community and identify strangers and intruders |
| Open Space          | • create semiprivate back yard for each ground-level unit, with fencing or planting to delimit these spaces from communal areas  
• create semipublic front yard to every ground-level unit and provide planters or space to place flowerpots or window boxes where space is very limited  
• provide comfortable places to sit and socialize near building entrances  
• limit the number of households sharing each multifamily building entrance |
| Dwelling            | • set direct access from low-rise buildings to outdoor spaces to increase the chance of parental surveillance  
• place windows of frequently used rooms such as kitchen, living room, so that natural surveillance of nearby entries and communal open spaces can take place casually |
| Parking             | • make parking areas under casual surveillance from a number of units |
| Facility            | • provide lighting that illuminates entries, approaches, footpaths, playgrounds, courtyards, etc. to increase the visibility of public spaces from adjacent dwellings  
• install emergency telephone, electronic alarm systems, and video camera in vulnerable locations  
• gate community if necessary |
| Public Service      | • employ neighborhood watch program to get tenant involved in management  
• employing effective management techniques to minimize crime, such as patrolling by polices, resident organizations |
2.3 SOCIABILITY

Sociability is caused by the presence of others in public spaces, such as “children playing, greetings, conversations, communal activities of various kinds, and the most widespread passive social contacts” (Gehl, 1987, p. 14). Ranging from the superficial contacts of seeing, hearing and being watched to more meaningful connections such as greeting, playing, conversations, collaboration, being among others, and getting involved in events, outdoor social activity has a wide range of meanings. And it is influenced by the quality of neighborhood spaces, the architectural forms, people needs, and other natural factors (Whyte, 1980). Jan Gehl’s *Life between Buildings* is an excellent book dealing with the social life in urban open spaces. It categorized outdoor activity types and analyzed their relations with quality of outdoor space/architectural settings. Particularly, Gehl pointed out “the opportunity to see and hear other people implies an offer of valuable information about the surrounding social environment in general and about the people one lives or works with in particular” (Gehl, 1987, p. 23). So people and what people do is the most important subject in nearly all situations and are considered more essential and relevant than the spaces and buildings themselves. Distinct from the mass media through which we are informed about the larger more sensational world events, being with others let us learn about the more common but equally important details as well as gain ideas and inspiration for action. Thus “the frequent meetings in connection with daily activities can increase the chances of developing contacts with neighbors” (Gehl, 1987, p. 21). Based on investigations of public spaces in Australia, Denmark, and Holland, he established typological models of city/site planning, including strategies of assemble/disperse, integrate/segregate, invite/repel, and open up/close in. He then came up with the design for
walking space and staying places. According to William Whyte’s book *Social Life of Small Urban Spaces* (1980), the best-used public spaces are revealed to be “sociable places with more people in groups and more people meeting people” (1980, p. 17). Whyte illustrates findings of his “Street Life Project” and the related studies of parks, playgrounds and recreation areas in New York City. He makes a systematic investigation on the urban life of plazas, streets, sidewalks, building corners, indoor public spaces, etc. by using time-lapse filming. The study describes a variety of human needs: talking, sitting, watching, hearing, gaining sunlight, and food in public spaces. It also illustrates the relationship between these needs and the formation of diverse activity spaces. Suggestions for how to make places for good social life were presented in terms of urban design. In particular, “(w)hat attracts people most in public spaces is other people” and “people tend to sit most where there are places to sit”, which means the places with sittable characteristics draw the most people (Whyte, 1980, p. 19). He also points out the street corner, especially a busy corner, is the desirable stage for social activities instead of being walled off, and the best way to handle the problem of undesirables is “to make a place attractive to everyone else” (Whyte, 1980, p. 63). More recent research, Francis and Carr’s *Public Space* (1993) reveals the social basis for public space use, design and management. Based on the history of public life and public space, and a series of original case studies, the authors present an innovative approach for adapting the dimensions to the unique social and environmental context. They categorize three critical human dimensions: the users' essential needs, their spatial rights, and the meanings they seek. They also advocate these dimensions should guide the process of design and management of public space.
Stevens (2006) attempts to develop a comprehensive model of urban structure from a phenomenological and behavioral perspective by comparing the findings of two extensive empirical studies of users’ experiences in urban public spaces. One is from Kevin Lynch’s study of the mental maps and people’s wayfinding perceptions which examines people’s perceptions. The other is the author’s own study that focuses on people’s behavior. Stevens presents the idea of space for play as a design implication to promote the interactions of people and environment in the urban setting. He offers powerful advice for taking into account social behavior to explore the relationship between people and urban spaces. Public space design should allow the physical exploration of the space related to the bodily sensation, and engagement with meanings related to communicating with other people who share the space (p. 822).

Sidney Brower in Good Neighborhoods (1996) identifies the qualities of good neighborhoods that support residents’ preferred life-style and thus established four typologies of good neighborhoods as a working hypothesis. He analyzes past neighborhoods and the expectation of ideal neighborhoods, and then generalized the satisfactory qualities that residents associated with good place to live from a number of case studies. They include “A place that is clean and well maintained; a place that has a definite center; a place where neighboring homes are close to one another; a place with convenient public transportation; a place where residents feel safe and secure. …” (p. 98). Brower finally presents four-part typology of satisfactory neighborhoods: place-based typologies, activity-based typologies, personality-based typologies, and culture-based typologies. Community of Interest is characterized by common interests among community members instead of common income level, race, age, social status according to Newman (1980).
Design principles, site-planning guidelines and prototypical designs for potential applications of community of interest to urban development are elucidated.

Mark Francis’s *Urban Open Space: Designing for User Needs* (2003) and Helen Woolley’s *Urban Open Space* (2003) describe the relations of urban spaces and social needs, and give insights into the community design for people use and enjoyment. They established typologies of urban open spaces for satisfaction of user needs. The former was written based on the case study of Bryant Park in New York City and the latter focuses on the concept of “space for all” and the sustainability of city open spaces. Additionally, Sarah Gaventa in *New Urban Spaces* (2006), after describing a variety of worldwide urban space practices, presents the distinctive “new open spaces” that are compatible with local needs and local environment, such as temporary and transient spaces (Gaventa, 2006). Pauline Gallacher’s *Everyday Spaces* (2005) and Clare Marcus & Carolyn Francis’s *People Places* (1990) also provides a vivid view of how to make sense of urban complexity by designing everyday public spaces with people in mind. Especially, Marcus and Francis give the comprehensive design recommendations for urban plazas, neighborhood/mini parks, campus spaces, and elderly-housing/child care/hospital outdoor spaces. Clare Cooper Marcus and Wendy Sarkissian, in *Housing As If People Mattered* (1986), provide elaborate design guidelines for low-rise high-density family housing, including the layout of buildings, open spaces, community facilities, play areas, and walk ways to promote social interaction and the feeling of community.
Design Implication of Sociability:

The concept involves creating opportunities for casual contacts and informal places for seeing, hearing, meeting, and co-working with other people in the community (Table 2.3).

Table 2.3 Design Implication of Sociability

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density and form</td>
<td>• provide a variety of dwelling sizes so that when households are able to move within the same neighborhood or development as their space needs change, social networks can remain intact</td>
</tr>
<tr>
<td></td>
<td>• group dwellings in the medium and high-density neighborhood into small, identifiable clusters</td>
</tr>
<tr>
<td></td>
<td>• create clusters for families at approximately the same age or stage in the life cycle</td>
</tr>
<tr>
<td></td>
<td>• design dwellings low-rise style for meaningful contacts</td>
</tr>
<tr>
<td></td>
<td>• cluster dwellings around some common outdoor access way or landscaped space to increase the chance of neighbors meeting one another</td>
</tr>
<tr>
<td>Open Space</td>
<td>• clearly delineate public space (streets), community space (neighborhood parks, shared open spaces, play areas, communal laundries, community gardens, courtyards, etc.), and private space (dwellings and private open spaces)</td>
</tr>
<tr>
<td></td>
<td>• provide storage space in communal areas for strollers, bicycles, shopping carts, etc. close or adjacent to dwellings</td>
</tr>
<tr>
<td></td>
<td>• provide play spaces and footpaths in communal landscaped areas</td>
</tr>
<tr>
<td></td>
<td>• design sitting spaces including sittable features and careful sitting heights, chairs, benches to support street activities on plazas, street corners, building corners, sidewalks, indoor community houses</td>
</tr>
<tr>
<td></td>
<td>• provide outdoor sitting areas in school play areas, playgrounds, pathways, quiet secluded spots, basketball area, and locations close to a community building</td>
</tr>
<tr>
<td>Dwelling</td>
<td>• create visual complexity in façade design to enhance the distinctive community identity, such as height, color, setback, roof shape, trim and size</td>
</tr>
<tr>
<td></td>
<td>• design windows facing public or communal outdoor spaces and design some fences low enough to see over yet high and strong enough to lean on in order to encourage casual day-to-day social contact</td>
</tr>
<tr>
<td>Circulation</td>
<td>• design integrated pedestrian-vehicle circulation for slow traffic</td>
</tr>
<tr>
<td>Parking</td>
<td>• provide multiple small parking areas and multiple parking choices, such as parking lot, street parking, and parking garage</td>
</tr>
</tbody>
</table>
### 2.4 NEW URBANISM: AFFORDABLE HOUSING

The literature review has provided valuable guidelines on the physical design of housing. For example, Jan Gehl came up with typology of “assemble or disperse” for city/site planning, as well as the idea of “spaces for walking, places for staying” for detail planning of public spaces (1987); Oscar Newman demonstrated the idea of “defensible spaces” for design model of community outdoor spaces and typology of large-scale land use for city planning (1973). He also advocated the concept of “community of interest” for housing development and urban growth.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
</table>
| Pedestrian        | - provide pedestrian access along all streets as well as separate pedestrian-only routes through landscaped spaces  
|                   | - design off-ground pedestrian ways to accommodate activities that would traditionally occur on the street sidewalk, the porch, the path, or over the garden gate  
|                   | - share a common pedestrian open space increase the chances of seeing someone residents recognize or know |
| Community Identity| - name internal streets, walkways, and identifiable common areas, such as courtyards, and include these names on site plans given to new residents and orientation maps at site entries  
|                   | - designate local farmer market, distinctive local festivals, community special events such as the music/movie night to enhance residents’ pride and the sense of community  
|                   | - provide for the possibility of neighbors collaborating on tasks that have traditionally been undertaken in private dwellings, such as a collective dining room/kitchen, a community garden, a workshop and tool loan services for gardening, house repair, and carpentry |
| Public Service    | - provide a community center for multiservice for welfare workers, citizen’s advice, and neighborhood associations/groups  
|                   | - provide play facilities, picnic tables, barbecues, drinking fountains, litter receptacles, public phones, day-care centers, laundries, swimming pools, and local shops that match outdoor communal needs and increase the chance to meet further casual encounters |
| Special Concern   | - design public space accessible to physically disabled |

Table 2.3 (cont.)
(1980); Sidney Brower demonstrated the idea of “satisfactory neighborhood typologies” based on the essential neighborhood qualities of ambience, engagement, and choicefulness (1996).

Above all, “New Urbanism” (or “Smart Growth”), professional in contemporary urban planning, represents “a turning away from the principles that have characterized American urban design since the 1950s” —Urban Sprawl (Rybczynski, 1993). It absorbed the essence of above theories and evolved into the most significant urban design movement of this century. New Urbanism is a “rediscovery of the virtues of traditional gridded streets scaled to the pedestrian, and a return to cities that integrate a diversity of urban uses—commercial and industrial as well as residential—rather than being zoned according to single functions” (Rybczynski, 1993). It advocates the idea of compact neighborhoods, transit-oriented development, pedestrian/bicycle-friendly design, healthy communities, historic preservation, safe streets, green building, and redevelopment of existing area. As mentioned in Victoria Transport Policy Institute (VTPI) report New Urbanism (July 2008), “(m)any see the New Urbanism as a way to accommodate growth while enhancing community and environmental objectives.” It can give people better options for where they live and work. And it can be reasonably incorporated into the redesign of existing urban communities with little barriers. Generally, New Urbanists believe a good community should have the characters of “protecting the public realm and creating quality public spaces” to help “create more community identity and cohesion, leading to stronger and healthier communities”; Streets being designed for “walking and cycling”; a variety of dwelling types: “houses, row houses, and apartments, for younger and older, singles and families, the poorer and the wealthier”; close elementary school, parks, trails and playgrounds in proximity; places to work “within and
adjacent to the neighborhood, including shops, office buildings, and live-work units” (VTPI, 2008). As significant practitioners of New Urbanism community planning, Calthorpe Associates, Pyatok Architect INC., and Duany Plater-Zyberk & Company present many concepts contributing to better affordable housing (Table 2.4).

Table 2.4 New Urbanism Design Principles

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Center</td>
<td>• this is often a plaza, square or green, and sometimes a busy or memorable intersection. A transit stop should be located at this center.</td>
</tr>
<tr>
<td>Public Spaces</td>
<td>• they include sidewalks and paths, parks, Streetscapes and public buildings. This helps create more community identity and cohesion, leading to stronger and healthier communities.</td>
</tr>
<tr>
<td>Public Buildings</td>
<td>• they are placed close to the sidewalk and to each other, creating an urban sense of spatial definition. Buildings towards the edges are placed further away and further apart from each other, creating a more rural environment.</td>
</tr>
<tr>
<td>Walking and Cycling</td>
<td>• most dwellings are within a five-minute walk (a quarter mile) from the center. Streets are designed with sidewalks on both sides, bike lanes where needed, good crossings, traffic calming features used to control motor vehicle traffic speeds, and other features to encourage non-motorized travel.</td>
</tr>
<tr>
<td>Dwelling Type</td>
<td>• a variety of dwelling types takes the form of houses, row houses, and apartments, such that younger and older, singles and families, the poorer and the wealthier can find places to live. Density averages 6-7 units per acre or greater.</td>
</tr>
<tr>
<td>Places to Work</td>
<td>• they are within and adjacent to the neighborhood, including shops, office buildings, and live-work units.</td>
</tr>
<tr>
<td>Shops</td>
<td>• they sufficiently varied to meet common household needs, such as convenience stores, a post office, a bank machine, and a gym.</td>
</tr>
<tr>
<td>Ancillary Building</td>
<td>• it is permitted within the backyard of houses. It may be used as a rental apartment, or as a place to work.</td>
</tr>
<tr>
<td>Elementary School</td>
<td>• it is close enough so that most children can walk from their dwelling. This distance should not be more than one mile.</td>
</tr>
<tr>
<td>Parks, Trails and Playgrounds</td>
<td>• they are near every dwelling. This distance should not be more than one-eighth of a mile.</td>
</tr>
<tr>
<td>Roads and Paths</td>
<td>• there are highly connected networks which provide multiple routes between destinations, increasing accessibility and reducing problems if one route is closed. Access points into neighborhoods may be highlighted with a gateway or signs.</td>
</tr>
<tr>
<td>Thoroughfares</td>
<td>• they are relatively narrow and shaded by rows of trees that slow traffic and create an appropriate environment for pedestrian and bicyclist.</td>
</tr>
</tbody>
</table>
Table 2.4 (cont.)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Spaces</td>
<td>• parking lots and garage doors rarely end of front the thoroughfares. Parking is relegated to the rear of the buildings and usually accessed by alleys or lanes.</td>
</tr>
</tbody>
</table>

2.5 SUMMARY

The literature on public health shows how the community/neighborhood planning/design influences public health. It points the way to Cabrini Green redesign for creating a healthy place.

The literature on neighborhood safety presents excellent findings of the relationship between crime issues and neighborhood design as well as design guidelines to improve the neighborhood safety. It points the way to Cabrini Green redesign for creating a safe environment. The literature on sociability shows strong evidence that social activities can be supported by the built environment. It points the way to Cabrini Green redesign for creating a sociable neighborhood.

And the New Urbanism and affordable housing design principles successfully provide theoretical support and practical examples for redevelopment strategies of demolished public housing units.
CHAPTER 3
SITE STUDY

Of course, it is no easy task to create new developments that truly integrate what has come before, what exists today, and what one hopes for the future.


3.1 FINDINGS OF THE SURVEY

William Green Homes share the same resident characteristics with other complexes at Cabrini-Green neighborhood (Fig. 3.1; Table 3.1). The Cabrini-Green HOPE VI Survey (2001), conducted by the Cabrini-Green Local Advisory Council (LAC), the Chicago Housing Authority, the HOPE VI Human Capital Subcommittee and the Center for Urban Research and Learning (CURL) at Loyola University Chicago, presents the results of a survey of all current and relocated Cabrini households. It gives data on demography of the household, the education/employment status of adults in the household, family needs and services, and preferences for the new development. It is used to support the planning process for the HOPE VI mixed-income redevelopment of the Cabrini-Green public housing development. “A total of 1,494 surveys were completed, including 1,425 on site surveys, and 69 off-site surveys” (p. 5). The survey results describe social and community needs, safety and health needs,
sport and recreation needs, and employment and education needs (p. 24). It also shows residents would like to see more training and education services related to school, drug programs and gang programs interventions, and consumer and retail services, such as grocery stores, libraries, bookstores, fitness centers, transportation, family restaurants and theaters (p. 24-25). The data from this existing survey provide the key demographic information and essential guidance to the redesign strategies. The summary of the key issues and programming implications are as follows (p. 26-27).

Table 3.1 General Information

<table>
<thead>
<tr>
<th>SURVEYED HOUSEHOLDS</th>
<th>TIME</th>
<th>TOTAL ADDRESSES</th>
<th>METHODS</th>
<th>COMPLETED SURVEYS</th>
<th>SURVEY RESPONSE RATE</th>
<th>CONFIDENCE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>All current &amp; Relocated</td>
<td>05/21/2001-07/13/2001</td>
<td>1,950</td>
<td>On-site Off-site</td>
<td>On-site Off-site</td>
<td>77%</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,730</td>
<td>192</td>
<td>1,425</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥ 2 Return visits</td>
<td>Sending letters;</td>
<td>≥ 1 Return visits</td>
<td>1,494</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Door-to-Door</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Most households have **children**. About 91.7% of the households responding to the survey have school-aged children. Particular emphasis should be placed on services for children of school age.

2. About half or 47.9% of the families that responded have incomes that are below the national poverty line for the number of persons in their household. Lack of adequate income challenges all aspects of family life, and service programming and cost be should be appropriate for families with **inadequate incomes**.
3. A majority of the respondents are unemployed (57.0%), and over 50% of those who are unemployed are not currently looking for a job. Employment training and placement assistance services need to be appropriate for individuals who have been out of the workforce for long periods of time.

4. The typical respondent was a single female (69.5%), about 38 years old, living in a household with three or more members (63.9%), is very likely to have a child in the household under the age of 12 (69%), and who is slightly more likely to be unemployed (57%) than employed.

5. A majority (50% or more) of the respondents were extremely interested in the following family services: childcare, gang intervention, job training and placement (65%), sports and recreation, playgrounds, youth activities, adult after school program, youth after school program (over 65%), and business development assistance.

6. A majority of respondents were also extremely interested in a wide range of retail and community services: video rental, drug store, hardware store, grocery store, barber shop, beauty shop, beauty supply store, book store, cultural center, library, copy center, Laundromat, auto repair, dry cleaners, banking center, family restaurant, fitness club, transportation, theaters, and home computers”

3.2 SITE INVENTORY AND ANALYSIS

The project site is located at the north-end of Cabrini Green, known as the previous “William Green Homes” (Fig. 3.2). It is approximately 25.83 acres, bounded by Ogden Avenue and Clybourn Avenue to the north, Cleveland Avenue to the east, Division Street to the south, and Halsted Street to the west. The site once had 8 gallery style high-rise buildings: 1230 N. Builing,
CHAPTER 3: SITE STUDY

714 W. Division, 660 W. Division, 624 W. Division, 534 W. Division, 1230 N. Larrabee, 1340 N. Larrabee, and 630 W. Evergreen. Currently, there remain three 16 story high-rises one of which still accommodates less than 50% residents. A careful examination of existing conditions, opportunities, and limitations are conducted in the following inventory and analysis.

![Figure 3.2 Current Site Condition and Context of William Green Homes](Xinxin Chai 2009; From google.com, Accessed in 2009)

### 3.2.1 Demographics

Existing demographic characteristics of Cabrini Green including African-American population, gender ratio, children density, and housing units are described below. Data from Census 2000,
Cook County, IL were collected and block groups around Cabrini Green within half mile radius were selected for the study purpose.

**African-American Population**

Cabrini Green has a highest proportion of African-American resident which also accords with the results from the existing survey “Most residents… more than 50%, are black people,” (HOPE VI, 2001). This fact implies a design concern for meeting cultural specific requirements: creating spaces and provide facilities for favorite leisure activities of African-American communities. Due to “(l)iterature on the construction of race in the landscape often focuses on the negative because, of course, the landscape reveals disparities resulting from layers of discrimination and injustice” (Lawson, 2007), specific strategies are to be experimented such as designing basketball courts and playgrounds, locating social clubs for local associations, increasing picnic areas and facilities at the neighborhood park, putting rest areas close to the parking lots, adjacent to the house entry, doorway, community entrance, and along the streets which was especially argued as the important social spaces for the black (Liebow, 1967).

Creating more chances for people gathering together is another important design issue, for example, the BBQ Day, the Community Garden Day, the William Green Homes Music/Movie
Night, and Cabrini Green Healthy Food Festival can be good alternatives to provide more opportunities for social interaction among residents (Fig. 3.3).

**Gender Ratio Distribution**

Female African Americans are the majority residents in these neighborhood areas. The redesign should consider the gender specific needs including safety, leisure, job opportunities and child care. Since women are more vulnerable than men, the outdoor space between buildings should be designed to provide more surveillance that acts as transitional area ranging from public space (street/parking lots) to semi-private space (building/yard). Design for safety addresses not just women’s concerns but of the entire vulnerable population. It includes creating courtyard building groups, reducing accessibility from streets to buildings, adding porch and balcony at the front door, designing hierarchical shared common places to provide sociable as well as safe spaces. Amenities such as street lights and telephone stands can also help people gain the sense of safety. In addition, related community services including police patrol and neighborhood watching program can be effective (Fig. 3.4).
Children Density

Children under 18 years old occupy more than 50% proportion in Cabrini Green, which again supports the findings of the HOPE VI survey (Fig. 3.5). Thus the design concerns include providing community greenery and safety design for children’s physical and mental health. The design elements include walkable streets, playgrounds, sport fields, pedestrian/bicycle-friendly pathway, and various sized parks. For safety concerns, elementary schools and after school institutions should be located within a walkable distance without crossing outer heavy vehicle traffic. Moreover, daycare services should be provided, which can also be a potential job opportunity for local residents.

Housing Units Distribution

The adjacent north-west and south-east buildings have a higher vacancy ratio (Fig. 3.6). Residents are moving out of these areas thus leaving Cabrini Green in a deteriorating circumstance. Consequently this situation affects
safety and health of the remaining part of the neighborhood. Thus it is necessary to tear down the remaining high-rises and replace them with new development to attract people back.

3.2.2 Context

Site Conditions

By July 2009, buildings on the site included two elementary schools, a historic church, three high-rises, and Stanton Park in the center. One city farm and police station are located adjacent to the south boundary of the site. These institutions are preserved and the fire station within the site is combined with the community center in redesign (Fig. 3.7).

Adjacent Neighborhoods

Eight major neighborhoods are located adjacent to the site: Orchard Park Townhomes, North Town Village, Old Town Village (West and East), River Village (North), Parkside of Old Town, Cabrini Row Houses, and the Larrabe (Fig. 3.8). All are multi-family housing units. Each of them has a characteristic space configuration. The spatial elements include street, alley, courtyard, node, and buildings. Housing ranges from 1-story row houses, 2 to 3-story townhomes, clusters, free-style duplexes, and 4 to 6-story slabs. The design proposal fits within this context and is consistent with the existing spatial typologies.
Figure 3.8 Adjacent Neighborhoods (Xinxin Chai, 2011)
3.2.3 Figure & Ground

The proportion of the open spaces exceeds that of the buildings within the site boundary, which is quite a contrast to the surrounding mid/high-density neighborhoods (Fig. 3.9). Retail stores, gas station and shopping center are also located nearby. Such urban fabric presents the opportunity of developing mixed land use, infilling large vacant open spaces, replacing high-rises with low/medium-rises, being compatible with the spatial character of adjacent neighborhoods, and creating traffic and walkable connections to surrounding commercial areas.

3.2.4 Street Pattern

The street system is categorized into avenue, boulevard, road and street based on their functional characteristics (Fig. 3.10). Clybourn Avenue as a local road shapes the north boundary of the site which provides the potential major access to the site. Ogden
Avenue, Evergreen Avenue and Scott Street are three major on-site streets and currently serve both vehicles and pedestrians. The outer roads Howe Street, Crosby Street, and Cleveland Avenue are three potential accesses to the on-site circulation.

### 3.2.5 Transportation

The transportation system around the site includes automobile traffic, subway (Red Line), and railroad (Fig. 3.11). Based on the traffic status, Halsted Street and Division Street have heavy traffic. Clybourn Avenue has medium traffic load and Larrabee Street has the slow traffic. More than six bus stations are located around the site along Halsted Street and Division Street. At the same time, a subway station is located on the north end of Clybourn Avenue. It is important not to increase the amount of traffic load on the existing fast-traffic roads. And there is also an opportunity to set the major site access on the
mid/slow-traffic road Clybourn Avenue and add bus stations on it to achieve transit-oriented goal. Also, adding crosswalks at surrounding road intersections and on-site access points should be considered.

3.2.6 Pedestrian Way and Bike Rack

There are three important pedestrian routes around the site, Halsted Street, Division Street, and Clybourn Avenue. Of them, Halsted Street and Division Street have existing bike lanes, and Clybourn Avenue is a recommended bike route. Most bike racks are located along Clybourn Avenue, Division Street, and at the intersection of Halsted Street/Clybourn Avenue. This presents an opportunity of defining Scott Street as the on-site pedestrian way to connect two existing pedestrian routes. Also, pedestrian/bike-friendly design should be considered on Clybourn Avenue and Division Street. Due to the large amount of

Figure 3.11 Transportation Analysis (Xinxin Chai, 2011, Adapted from GIS Portal)
bike racks at the intersection of Clybourn Avenue and Halsted Street, a resting/recreation area for bikers such as park and plaza should be considered (Fig. 3.12).

3.2.7 Park

Lincoln Park, a large public park is located at the lakeside area to the east of the site (Fig. 3.13). Seward Park as the largest park nearby is located opposite to the site across Division Street. Stanton Park exists inside of the site. It is important to establish linear green connections between on-site green spaces and outer parks. And it is also crucial to increase small green spaces, pocket parks on the site to create a neighborhood park system. Stanton Park can be integrated into the central neighborhood open space system. Community garden is another consideration for providing a productive landscape space for community events, and a green extension to the adjacent city farm.

Figure 3.12 Pedestrian Way and Bike Rack Analysis (Xinxin Chai, 2011, Adapted from GIS Portal)
CHAPTER 3: SITE STUDY

Figure 3.13 Figure & Ground Analysis (Xinxin Chai, 2011, Adapted from GIS Portal)

Figure 3.14 Public Service Analysis (Xinxin Chai, 2011, Adapted from GIS Portal)
3.2.8 Public Service

A number of schools, fire stations, and police station are located around the site. Among them, two elementary schools and one high school are close to the site. One fire station exists on the site and one police station is located across the Division Street. No community center is found nearby. Thus it is important to create a community center on the site to provide local business and recreation spaces, such as job training, daycare service, public library, sports fields and playgrounds. There is also an opportunity to develop a Neighborhood Watch Program for residents who stay at home and make them in charge of the public space surveillance within the neighborhood for safety concerns (Fig. 3.14).

3.2.9 Behavior Mapping

Behavior mapping was conducted during the daytime of a typical weekday in 2009. Three types of subjects, people, car, and bicycle were recorded on eleven places and one route on the site. Generally, people observed at the residential area are majorly African Americans most of which are teenagers, young and middle age adults. Those at the school area are mostly Caucasians and Asians including both adults and 6-12 year old children. Both individuals and groups were observed. People’s activities include standing/watching, standing/talking, purposely walking, lingering, jogging, bicycling, and playing. Of them, moving activity includes crossing the street, along the sidewalk, and towards the shopping center. Cars were observed passing through the site on Scott Street and parking at the north school area, the parking lots on the west and central area. Typically, places that accommodate vivid activities are entrance of buildings, building
corners, parking lots, playgrounds, seating places, under-trees, street corners, sidewalks, bus stations, place near retail stores, and shopping center (Fig. 3.15).

Figure 3.15 Behavior Mapping (Xinxin Chai, 2009)
Proposed on-site circulation and pedestrian/bike pathway design should take into account the existing movement patterns of residents. Careful detail designs for building entrance, front/back yard, courtyard, street corner, and pedestrian-only walkway are required. Parking lots and playgrounds should be designed not only for parking and playing but also for social interaction. There is also an opportunity to create more seating places like vest/pocket plazas with careful planting design for people’s outdoor gathering. At the same time, reducing the height of the buildings is an effective way to encourage communication between people indoors and outdoors.

3.3 CHA RESOURCES

The Chicago Housing Authority (CHA) and related organizations plan to “tear down all the remaining buildings in Cabrini Green, including the ones currently existing at William Green Homes”. However, “CHA has not sought a developer for the site. The current plan is to do approximately 250-300 public housing units”. “There are no redesign plans at this time. Once a developer is selected they will propose a design. The plan is to restore the street grid, have a diversity of housing styles facing the streets and a ‘walkable’ neighborhood where parks, open space, retail, schools and churches are integrated in the community” (CHA, 2009). The interview with the Development Manager at CHA (CHA, 2009) revealed that the three remaining high-rises currently have 50% vacancy, including the completely empty one in the middle. All of them will to be demolished in the future. Details are shown in Table 3.2.

According to the digital brochure, CHANGE (CHA, 2002), the idea of Cabrini Green’s “High-rise public housing neighborhood” is replaced by the “Mixed-income” New Urbanism neighborhood that is compatible with the characteristics of nearby Gold Coast and Loop areas.
Table 3.2 Details of the Interview Results

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
<th>DESIGN IMPLICATIONS</th>
</tr>
</thead>
</table>
| What are CHA’s current and future plans for William Green Homes?          | • Although no developer has been chosen yet, the new plan will be similar with that of Parkside of Old Town, the Mixed-income neighborhood. It will include 1/3 public housing (300 units), 1/3 market-rated units, 1/3 affordable housing, variety of building types of mid-rise and townhomes (No high-rise at all), green space, and walkable open spaces.  
  • Planning committee and residence participated meeting will work together for the concept plan and proposals. | New Urbanism Neighborhood  
Variety of Dwelling Types  
Mixed Income Community  
Pedestrian-friendly Design |
| What are the projected advantages of the New development over past conditions? | • Public housing is a much safer and non-isolated environment. The mixed land use provides more opportunities for public housing residence to blend in and makes the nearby parks, school, stores, recreation more accessible.  
  • Also, more work opportunities are provided in the New Development. | Mixed Land Use  
Safety Design  
Social Interaction  
Accessibility  
Self-efficiency |
| Are there any anticipated shortcomings or areas of concern of New development? | • The challenge is how to blend different income levels and make an actual community within which people can know, communicate and be comfortable with the neighbors, as the relationship within the old Cabrini Green. | Social Interaction  
Sense of Community  
Community Activities |
| How has (or will) CHA take the existing Cabrini-Green HOPE VI survey results into account when envisioning the redesign of William Green Homes? | • Didn’t see it before. | The results of the survey present provide plenty of background information on CG, that should influence the direction of the redesign. |
Table 3.2 (cont.)

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
<th>DESIGN IMPLICATIONS</th>
</tr>
</thead>
</table>
| What issues/problems do you find and what services do you provide (building services, community services, and community policing)? | • For Health: No big building but low-rises; Neighborhood compatible with nearby context; Improving playground; Landscape will be taken into account once funds permit, such as coordinating with nearby Sewart Park. Available green spaces for residents.  
• For Safety: Defensible spaces; security camera; security guard; non-gallery way and hidden space; no exposed elevator; visible open view. ID for entry of the remaining high-rises  
• For Sociability: No isolated neighborhood design; Rules of the community and neighbors; community Picnic; resident meeting; Social behavior Needs. | Low-rise Houses  
Compatible with Context  
Green Spaces  
Playgrounds  
Landscaping  
Safety Design  
Social Interaction  
Social Services |
| Could you talk more about the entire Cabrini Green programming?            | • There are totally 1,200 public housing, affordable housing, and market-rate housing units. The goal is to create safe, decent, non-isolated, self-sufficiency, compatible community.  
• Not only doing new housing, but also social services including helping with drug issues, credit issues, educational needs (college program, nursing program, etc.), house-keeping, environment issue, child-care, employment assistance, family partnership, park, church, extra curriculum activities for children, mentality program. | Variety of housing types  
Social Interaction  
Social Services  
Compatible Community  
Safety Design |
| Any other organizations besides CHA related to Cabrini Green management?   | • Cabrini Green Local Advisory Council for planning/design partner & developer;  
• H.J. Russell & Company for management                                                                                                                                                                                                                                     | Local resident organizations  
Neighborhood programs |

The first phase redevelopment plans to build up on-site and off-site new housing units both of rental and home for sale at Cabrini-Green Extension North area. It also attempt to “restore the
city street grid, improve the street width, street lighting, landscaping, and sidewalks, increase green space and parks”, and so on. The second phase plans to put “700 units including 200 units for public housing at Cabrini-Green Extension South area”. Of that, “300 building units have already been built at Parkside of Old Town”. “The contemporary architecture style, modern fixture, and new energy efficiency appliance all contribute to establish a new comfortable home”. Additionally, the concern of new parking lots, grocery store, library, parks, retail, and restaurant make it possible that people living at Cabrini Green have “the same access to the community resources as the other Chicago residence”.

3.4 SUMMARY
The currently isolated Cabrini-Green neighborhood is facing deterioration and new development aims to tear down the remaining high-rises and replace with low/mid-rise townhomes in a mixed-use land. African-American population forms the majority of the residents in Cabrini Green and adjacent areas. The new development aims to meet the spatial needs and facility service for their everyday activities. Female population is the majority in Cabrini Green area. The redesign needs to create more and safe public/semi-public spaces for their everyday activities. About 91.7% of the households have school-aged children. Particular emphasis should be placed on services for children of school age. In addition, the adjacent neighborhood context requires compatibility of urban fabric and spatial typology. The analysis of street pattern, transportation, pedestrian way/bike rack, park, and public services provides the redesign implications for site access and vehicle circulation, bus stations and crosswalks, pedestrian/bike pathway, green space system, community service and programs. In addition, behavior mapping analysis implies creating suitable scaled/sized public spaces for people’s activities.
If the past history of a neighborhood is to be considered, whose past should be most acknowledged?
If a new development should represent the needs of a diverse community, whose voices should take precedence? If a new development is a harbinger of the future, whose vision of that future should drive its design?


CHAPTER 4
PRECEDENTS & PROGRAM

4.1 DESIGN PRECEDENTS

Design precedents cover three successful case studies of New Urbanism and Affordable Housing planned and designed by Calthorpe Associates, Pyatok Architects Inc., and Dyany Plater-Zyberk & Co.. Specifically, I examine the designs focused on health, safety, and sociability concerns that have made the Highland’s Garden Village, the Lion Creek Crossings, and the Willow Oak outstandingly successful. Enlightened by these precedents, I thus develop a program of Cabrini Green redevelopment at the end.

4.1.1 Highlands’ Garden

**Village** (Denver, Colorado 2002-2007)

Designed by Calthorpe Associates, the 27-acre site of the former amusement park Elitch Gardens was successfully transformed into

Figure 4.1 Master Plan (From Calthorpe Associates, Accessed in 2011)
a mixed-use, transit-oriented neighborhood with diverse community amenities, new open spaces, and a variety of housing opportunities. It has won EPA’s Smart Growth Award and is frequently cited as one of the Best Places to Live. Generally, the project provides the following six Sociability-Concern references for my thesis (Fig. 4.1-4.3).

1. **Mixed-Income Housing Types.** Housing units is both diverse and contextually responsive. A wide range of rental and for-sale housing types help mix different income groups and family structures, fostering increased socio-economic integration and yielding a realistic balance of housing types.

2. **Walking Paths.** The community’s pedestrian-friendly design provides safe and convenient walking paths, with connectivity to primary areas of interest.

3. **Open Space Network.** A network of gardens, plazas, and open spaces creates a vibrant, friendly neighborhood with ample public meeting space. Tree-lined streets form an attractive public armature for new development, while a restored urban
creek, the preservation of mature trees, and incorporation of historic features help uphold the unique character of the village.

4. **Local Commercial.** The commercial retail and office buildings include fitness, insurance, eye-care, dental, salon, cleaners, coffee shop, pizza, liquors, and farmers market.

5. **Public Services.** Important amenities include a school, a walkable retail village, an historic theater, clubhouse, fitness center, library, community room, laundry center, storage facilities, conference and business center, parking lots and garages, garden courtyards, community garden, and planned activities and social events, such as the Theater Plaza and the pavilion for weddings, fair, and concerts.

6. **Special People Group.** Senior Apartments is surrounded by exquisitely-landscaped parks and walking paths, making it easy to get around. It provides options for affordable renting with a mix of studios, one and
two bedroom apartments.

4.1.2 Lion Creek Crossings (Oakland, CA 2008)

Designed by Pyatok Architects Inc., former site of Coliseum Gardens, the Lion Creek Crossings is a HOPE VI funded joint-venture to redevelop a 22-acre site of low-income affordable family housing: Townhome Style Apartments. It has won Gold Nugget Merit Award (2006), NAHRO Award of Excellence (2006; 2009), and Builder Magazine Grand Award (2006). In general, the project provides the following four Safety-Concern references for my thesis (Fig. 4.4-4.6).
1. **Central Court.** The townhomes are organized around a central court with rear-parking.

2. **Safety Design.** Front stoops, porches and bay windows increase livability and neighborhood safety. Each second level townhome has an ‘outdoor room’ above the carports, overlooking the auto court for increased security. As an extension of the eat-in kitchen, this trellised-covered room can be used as an outdoor dining room.

3. **Sense of Privacy.** For rental townhomes and affordable apartments, one group of 22 homes organized around a central private court. The other group of 84 homes is organized around a private central linear court, with town homes stacked above ground floor flats facing the park, and town homes in small clusters stacked above an on-grade parking garage. All families can enter their homes from ground floor entries as flats, three-story townhomes, or via one flight of stairs to their 2-story townhomes above the flats. This allows a sense of privacy and accountability, avoiding public corridors and elevators.
4. **Territoriality Design.** By organizing the 106 families into two groups, then subdividing the larger group into smaller clusters and town homes, the development achieves secure and easy-to-supervise territories. The larger group of 84 families has direct access to the restored creek and the 6 acre central park through three secured gateways from the private linear inner court.

4.1.3 **Willow Oaks** (Greensboro, NC 2000)

Funded by Hope VI Revitalization Grant and designed by Dyany Plater-Zyberk & Co., the 250
acre Willow Oaks has been transformed from the obsolete Morningside Homes public housing development and the surrounding Lincoln Grove area into a vibrant, mixed-use, mixed-income community providing affordable housing in a safe, dignified environment. In addition, the redevelopment offers residents opportunities to achieve career training, better jobs and self-sufficiency. The objective of the project is replacing the barracks-style housing with attached and detached housing types that would resemble the surrounding neighborhoods; improving transportation options and walkability; increasing economic opportunities; and providing public spaces such as parks and greens. Basically, the project provides the following four Health-Concern references for my thesis (Fig. 4.7-4.9).

1. **A Variety of Housing Types.** The housing types—which include apartments, townhouses, and single-family homes—are inspired by typical Greensboro architecture, allowing the new development to blend in gracefully with the surrounding historic neighborhoods.
2. *Public Buildings/Public space.* A combined childcare center, recreation center and life-long learning center is a focus of the community. It offers neighborhood-scaled retail and support services and a family self-sufficiency program that focuses on education, counseling, and job placement. A combination childcare/community center is included as a key component of the neighborhood center, which is within walking distance of a majority of the residents.

3. *Pedestrian-Friendly Design.* Safety is increased through the provision of pedestrian-friendly streets, porches, and short building setbacks. The addition of sidewalks encourages residents to walk and visit within their community.

4. *Mixed-Income Community.* Mix-income plan provides rental and owner-occupied units at a wide spectrum of income levels, including 300 units for low-income residents.

5. *Mixed-use Land.* Mixed-use land plan mingles single family and attached
housing throughout the neighborhood. Block-faces have a seamless look, regardless of whether units are rented or owner-occupied. Service and civic uses are also being integrated into the neighborhood.

4.2 RELEVANCE AND IMPLICATIONS

The three projects above provide contemporary examples of transforming demolished sites into mixed-use neighborhoods with diverse housing types as a way of revitalizing urban areas. They inform my design in the following ways.

1. **Mixed Land Use Plan** of residential, commercial, recreational, and educational areas;
2. **Mixed Income Residents Base** focusing on mid/low-income people;
3. **Various Housing Types** including row houses, townhomes, cluster condos, and courtyard apartments;
4. **Pedestrian-Friendly** streets, sidewalks, yards, and porches;
5. **Open Spaces** including parks, greens and parking spaces/garages;
6. **Public Buildings** including retails, childcare, healthcare, job training, community center, school, and library;
7. **Community Events** such as community garden festival, fresh food day, farmers market, and neighborhood concert/movie night;
8. **Neighborhood Safety** by limiting accessibility of buildings, defining territories of outdoor spaces, and surveillance.
Total of 318 housing units are proposed for the 25.83 acre William Green Home area (Table 4.1)

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Land Use</td>
<td>Residential&lt;br&gt;Educational&lt;br&gt;Parks&lt;br&gt;Commercial&lt;br&gt;Community Services</td>
</tr>
<tr>
<td>Mixed Income Resident Composition</td>
<td>Medium income&lt;br&gt;Low income&lt;br&gt;Unemployed</td>
</tr>
<tr>
<td>Housing Types</td>
<td>Townhouse&lt;br&gt;Row house&lt;br&gt;Courtyard&lt;br&gt;Clustered&lt;br&gt;Multi-family Apartments</td>
</tr>
<tr>
<td>Mid-rise/Low-rise</td>
<td>1-1.5 stories&lt;br&gt;2-3 stories&lt;br&gt;4 stories</td>
</tr>
<tr>
<td>Circulation</td>
<td>Major Loop&lt;br&gt;Secondary streets&lt;br&gt;Pedestrian-only pathway&lt;br&gt;Green nodes</td>
</tr>
<tr>
<td>Green Space</td>
<td>Stanton park&lt;br&gt;School yard&lt;br&gt;Community garden</td>
</tr>
<tr>
<td>Recreation</td>
<td>Playground&lt;br&gt;Sports field&lt;br&gt;Picnic area&lt;br&gt;Bicycling route&lt;br&gt;Community center</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary school&lt;br&gt;Pre/after-school learning center&lt;br&gt;Career Training&lt;br&gt;Library</td>
</tr>
<tr>
<td>Public Services</td>
<td>Fire department&lt;br&gt;Food cooperative&lt;br&gt;Day-care center&lt;br&gt;Youth center&lt;br&gt;Salon&lt;br&gt;Community garden&lt;br&gt;Neighborhood Watch Program</td>
</tr>
<tr>
<td>Community Events</td>
<td>Healthy Food Day&lt;br&gt;WGH Community Garden Festival&lt;br&gt;Movie/Concert Night</td>
</tr>
</tbody>
</table>
4.4 SUMMARY

The three case studies of New Urbanism and Affordable Housing, Highlands’ Garden Village, Lion Creek Crossings, and Willow Oaks provide relevance and implications for the redesign of the subject site which range from land use pattern to housing varieties, safety strategies, pedestrian-friendly design, landscaping public open spaces, and community activities. The consequent program focuses on land use, income level, housing types, building heights, circulation, green space, recreation, education, public services, and community events.
CHAPTER 5
SCHEMATIC PROPOSALS

Cities and suburbs across the globe are facing a crisis of livability, traffic, cost, environmental, and social dimensions. The solutions involve new land use patterns that connect now isolated enclaves into mixed-use communities.


5.1 HEALTH-FOCUSED PLAN

5.1.1 Recreation Corridor

Figure 5.1 Schematic Site Plan (Xinxin Chai, 2010)
The essential idea of health-focused plan is the walkable and bicycle path system: the recreation corridor. Due to the important impact that the built environment has on physical activity, walking and bicycling are identified as two significant physiological-environmental variables to improve public health. This scheme is the interpretation of pedestrian/bicycle route system in order to create opportunities for residents’ physical activities (Fig. 5.1- 5.3).

5.1.2 Design Elements

1. **Medium Density & Mixed Land Use** Medium density and mixed land use with compact building blocks are proposed.

2. **Street Form** Grid pattern is proposed to increase transit access and create connectivity. However, landscaping on site boundaries helps block air pollution on heavy-traffic streets.

3. **Park System** It consists of large central green space and small pocket parks. Tree-lined boulevards and pedestrian/bicycle-only pathway comprise walking and bicycling corridor system.

4. **Traffic Safety** It includes reducing street width and creating on-street parking. Less direct accesses to building are designed. Crosswalks with marks are also proposed.

5. **Planting Design** It requires growing trees along all the roads and walkways.
6. Physical Exercises The opportunities of physical exercises are generated by proposing the walkable and bicycling path system and installing recreational facilities close to open spaces. Other means are suggested such as creating accesses to healthy food and reducing streets width with careful-designed details to encourage people to stay outdoors longer time.

Figure 5.3 Design Analysis (Xinxin Chai, 2011)
5.2 SAFETY-FOCUSED PLAN

5.2.1 Public Open Space Hierarchy

The core of safety-focused plan is to establish a public open space hierarchy: the courtyard system. It aims to define clear territories and provide sufficient surveillance chances between building units. The introverted character of courtyard building group forms the primary feature of semi-public open spaces under surveillance. The courtyard system also serves as

Figure 5.4 Schematic Site Plan (Xinxin Chai, 2010)
transports and provides places supporting and encouraging routine activities. It is supplemented by other types of open spaces such as pocket parks, playgrounds, community gardens, and central park (Fig. 5.4- 5.6).

5.2.2 Design Elements

1. Surveillance To limit the accessibility and visibility of private properties and create chances for eyes on open spaces, courtyard is used as the primary form to organize dwellings and affiliated spaces. The variety of size and scale of the courtyards characterizes the hierarchy of the courtyard system, which allows smaller courtyard building groups comprise a bigger courtyard group.

2. Hierarchical Open Space Hierarchical open space is a system of private, semi-private, semi-public, and public space varying in scale and self-enclosed rate within the neighborhood. It forms a sequence of open space hierarchy and also helps create chances for people communicate one another. It includes balcony, porch, building entry, lobby, stair way, courtyard, playground, sidewalk, walking path, parking lot, garden, commons and park.

3. Defined Barriers It helps to shape the sense of territoriality by using shrub or wire to fence houses, using softly-edge to enclose public spaces, and using gate to limit the access to the neighborhood.
4. **Public Amenities** Setting police patrol and regulation codes, hiring guardians and handlers, installing telephones, alarm, and video camera are effective ways to increase the sense of safety and reduce crime opportunities.

5. **Neighborhood Watch Program** It is another self-efficient way for local residents who stay at home to watch outdoor open spaces.
5.3 SOCIABILITY-FOCUSED PLAN

5.3.1 Communal Zone

The main idea of sociability-focused plan is to reduce social isolation and increase communication among residents by creating a public space system: the communal zone. It is
dominated by a central community garden in the center of the neighborhood. The community garden is integrated with an education center, club house, existing church, central park, playgrounds, and various resting areas. Pedestrian/bicycle ways link each part of them and a vehicle/pedestrian-shared path connects the community garden and community center/farmer market which is located across the city street (Fig. 5.7-5.9).

5.3.2 Design Elements

1. Common Front/Backyards In order to increasing the chance of seeing, hearing, talking, meeting, walking, sitting, standing, and playing among residents, shared green spaces are proposed as the common front/backyards.

2. Central Communication Area The central communication area consists of a central park, community garden, farmers market, playgrounds, club house, and education center. It integrates a variety of activities which increase the chances of casually encountering other people.

3. Working Landscape The integrity of community garden, farmers market, and city farm consist the working landscape of new William Green Homes. Thus, the community recognition and the sense of place are strengthened by working together within the neighborhood.

4. Public Activities In order to encourage activities in public spaces, carefully
designed spaces are designated on street corners, sidewalks, building entries, bike rack lots, parking lots, common yards, and resting plazas in the central park.

5. Community/Local Events Community and local events, such as Community Movie Night, Concert Party, William Green Garden day, and Fresh Food Festival, are effective ways to enhance the sense of belonging and social ties.

Figure 5.9 Design Analysis (Xinxin Chai, 2011)
6. Employment Opportunities Employment opportunities are increased by providing variety of local commercial retail and office services, such as salon, barber shop, fitness, insurance, eye-care, dental, cleaners, coffee shop, liquors, etc.

5.4 SUMMARY

Three alternative plans are proposed to solve three particular problems, public health, neighborhood safety, and social interaction. Besides the general concern of the compatibility with surrounding urban fabrics, the pedestrian/bike-friendly path system, hierarchical semi-public open space system, and integrated/shared public space system with community facilities are created as the three focuses of the alternative plans. These are based upon medium-high building density, well-articulated traffic circulation, surveillance strategy, territoriality located through hierarchical open spaces, local amenities and events, and employment opportunities. The next step of generating the illustrative plan will systematically synthesize all three and propose an integrated solution to achieve three targeted goals — health, safety and sociability.
While we sometimes wish it were otherwise, planning is a technique more than an art. As in medicine or the law, its evolution should be constant but must occur atop a foundation of knowledge collected through the centuries. And design can be considered clever simply by being novel, but cannot be trusted until it has been shown to produce positive outcomes.


6.1 SITE PLAN

Building on previous work, the illustrative plan of William Green Homes is proposed as the synthesis of three schematic proposals. It balances and integrates the essential goals of health-focus, safety-focus, and sociability-focus plans. Recreation corridors for walking and bicycling, hierarchical courtyard building groups, and the central park linked to community garden & farmers market highlight the three aims targeting at public health, neighborhood safety, and social interaction. In addition, the plan proposes mixed land use pattern, mix-income resident composition, medium/high housing density, diverse housing types, the street pattern compatible with urban fabric and public transit, and various public buildings and services (Fig. 6.1).

6.2 DESIGN DESCRIPTION

6.2.1 Land Use

The land use plan proposes a mixed-use community that integrates residential, educational, recreational, green spaces, local commercial & retail, local business, and public transit. Mixing housing, local retail and business in the new William Green Homes offers a walkable, safe, and sociable neighborhood where people can live, work, and play (Fig. 6.2). Table 6.1 shows the
Figure 6.1 Site Plan (Xinxin Chai, 2011)
Table 6.1 Land Use Quota (Xinxin Chai 2011)

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>SECTION</th>
<th>DETAIL</th>
<th>AMOUNT (units; stories)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Row House</td>
<td>Affordable</td>
<td>75;2-3</td>
<td>8.1 acres; 318 units</td>
</tr>
<tr>
<td></td>
<td>Townhome</td>
<td>Market-rated</td>
<td>46;2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Courtyard Apartment</td>
<td>Market-rated</td>
<td>44;2-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cluster Condo</td>
<td>Affordable</td>
<td>140;3-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free Style Multi-Family Duplex</td>
<td>Senior Housing</td>
<td>13;1-2</td>
<td></td>
</tr>
<tr>
<td>Educational</td>
<td>Elementary Schools</td>
<td>Friedrich Von Schiller Public School</td>
<td>1;2</td>
<td>0.9 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sojourner Truth Elementary School</td>
<td>1;2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Library</td>
<td>-</td>
<td>1;4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Youth Center</td>
<td>Pre/after-School Learning Program</td>
<td>1;2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child-care Center</td>
<td>Day Care</td>
<td>1;2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Existing Historic Church</td>
<td>Religious Events</td>
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<td>Existing Stanton Park</td>
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<td></td>
<td>Pavilion</td>
<td>-</td>
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<tr>
<td></td>
<td>Movie Plaza</td>
<td>Movie, Concert, Music, etc.</td>
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<tr>
<td></td>
<td>Picnic Area</td>
<td>Outdoor Picnic Mounds</td>
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<td></td>
<td>Rain Garden</td>
<td>-</td>
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<tr>
<td></td>
<td>Basketball Fields</td>
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<td>4</td>
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<td>Playgrounds</td>
<td>Tot Lots between Dwellings</td>
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<td></td>
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<td>Educational Center Outdoor Yards</td>
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<td>Pocket Park</td>
<td>Mini-parks between Dwellings</td>
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<td>Walking &amp; Bicycling Path</td>
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<td>Community Garden</td>
<td>Vegetable, Flowers, Fruits, Children Garden, etc.</td>
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<td>Barber Shop</td>
<td>On Command</td>
<td>0.8 acres</td>
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<td>Salon</td>
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<td>Restaurant</td>
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<tr>
<td></td>
<td></td>
<td>Coffee Shop</td>
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<td></td>
<td></td>
<td>Liquors</td>
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<td></td>
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<td></td>
<td></td>
<td>Book Store</td>
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<td>Grocery Store</td>
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<td></td>
<td>Business Offices</td>
<td>Career Training</td>
<td>On Command</td>
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<tr>
<td></td>
<td></td>
<td>Insurance</td>
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<td>Garden Maintenance</td>
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<td>Club Houses</td>
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<td>Laundry</td>
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<td>Farmers Market</td>
<td>Indoor Market Place</td>
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Table 6.1 (cont.)

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<th>LAND USE</th>
<th>SECTION</th>
<th>DETAIL</th>
<th>AMOUNT (units; stories)</th>
<th>TOTAL</th>
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<td>Neighborhood Organization/Events</td>
<td>Neighborhood Watch Program</td>
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<td></td>
<td>WGH Community Garden Festival</td>
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<tr>
<td></td>
<td></td>
<td>Music/Movie Night</td>
<td>-</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Healthy Food Day</td>
<td>-</td>
<td></td>
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<tr>
<td>Parking</td>
<td>Outdoor Parking</td>
<td>WGH Community Garden Festival</td>
<td>200 lots</td>
<td>1.2 acres; 279 lots</td>
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<td></td>
<td></td>
<td>Music/Movie Night</td>
<td>48 lots</td>
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<td></td>
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<td>Healthy Food Day</td>
<td>31 lots</td>
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<td>Public Transit</td>
<td>Bus Stations</td>
<td>Surrounding WGH</td>
<td>5 × 2 stops</td>
<td>6 × 2 stops</td>
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<td></td>
<td></td>
<td>Within WGH</td>
<td>1 × 2 stops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internal Roads and Streets</td>
<td>Vehicle Pathways</td>
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<td>2.0 acres</td>
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</tbody>
</table>

quota of the entire 25.83 acre land use: 1) residential housing (31.5 %; 39 units/acre), 2) educational (3.5 %), 3) public open space (40.7 %), 4) parking (13.6 %), 5) community services for local commercial and business (3.1%), 6) public transit (7.7 %), and 7) existing historic church.

1. **Residential Area** It consists of diverse housing types of mid/low-rise row houses, townhomes, courtyard apartments, cluster condos, and free-style multi-family duplexes. They are for both rent and sale, comprised of market rate housing, affordable housing, and public housing which feasible for mix-income resident needs.

2. **Educational Area** William Green Homes Education Center area consists of two relocated existing elementary school, a public library, a child-care center, a relocated existing historic church, and a youth center for pre/after-school learning program. They are intensively located at the north end corresponding to Near North Career High School across the Clybourn Avenue.
3. **Public Open Space** Transformed from previous Stanton Park, the central park of William Green Homes consisting of a picnic pavilion, movie plaza, rain garden, picnic spots, and basketball fields, provides places for a variety of public activities (Fig. 6.3).

The walk/bicycle corridors also feature the pedestrian-friendly design of the neighborhood. Playgrounds and school yards within education center are especially for children play. Pocket parks within each housing groups provide places for people routine meeting and rest. Community garden serves as a communal place to improve social interaction as well as for recreational purpose.

4. **Public Buildings & Services**

Public buildings/services of the neighborhood include commercial retails, business office, clubhouse,
fitness, farmers market, and neighborhood organization/events. They are mostly local run, which increases the employment opportunities for residents of the neighborhood. Moreover, the balance between residential, commercial, business, and non-profit organizations helps to create a self-sufficient community which also makes appropriate transitions to the downtown Chicago area on the east. Besides, a fire substation and police station are proposed within the community center building.

5. Parking Parking alternatives within the neighborhood include outdoor on-street parking, parking lot, and indoor garage (Fig. 6.4). Typically, on-street parking serves each section of residential housing areas except for the multi-family duplex area with indoor parking garages for each household. Also, parking lots are mostly placed around public buildings/services areas.

6. Public Transit To achieve the goal of transit-oriented neighborhood,
five bus stops are sited close to the entries of the neighborhood along Division Street, Halsted Street, Clybourn Avenue, and Larabee Street. Of them, three are located at residential areas; the other two are at education center and community center. Moreover, a bus route with a general bus station is proposed at the church area on Evergreen Avenue which extends from North Town Village through the north part of William Green Homes.

6.2.2 Street and Circulation

The circulation plan makes full use of the street pattern that nearby North Town Village provides for the subject site (Fig. 6.5). Two perpendicular main roads of North Town Village are extended into the subject site and connected with the major loop circulation within the neighborhood to accommodate vehicle traffic. Also, a green node is adopted as another feature of traffic intersection to effectively improve traffic calming and greenery. Two pedestrian and bicycle corridors are perpendicularly sited in the center of the neighborhood, connecting Orchard Park Townhomes and Old Town Village West from north to south; Old Town Square shopping center and the nearby convenience stores from east to west. To achieve walkable neighborhood, the walking/bicycling system provides people with an exclusive access to adjacent neighborhoods, retails, community garden and fresh food as well as a physical exercises route and meeting places.
6.2.3 Housing Diversity

To achieve compactness and diversity for healthy communities, the housing plan of William Green Homes proposes a variety of housing types for various needs of mixed-income residents. There are five housing types for rent and sale: townhomes, row houses, multi-family duplex, courtyard apartments, and cluster condos. Of them, affordable row houses and cluster condos occupy the majority; townhomes, multi-family duplex and courtyard apartments are market rated housing units. Specially, multi-family duplex is designed for the senior apartment (Fig. 6.6, 6.7.).

1. **Townhomes** 14.5 %; 5.6 units per acre with 2 stories. Targeted to medium-income people group, the townhomes area has the lowest density and is located along Larabee Street facing a linear green space.

2. **Row Houses** 23.6 %; 9.2 units per acre with 2-3 stories. They are the most typical housing types in the neighborhood for low-income people group. Half of the row houses
are proposed as live/work units having ground retail or workshop with residential on top. This is a type for people who prefer home-base businesses.

3. **Multi-Family Duplex** 4.1 %; 1.6 units per acre with 1-2 stories. It is especially for senior and disabled people group with convenient amenities and services provided in the building group.

4. **Courtyard Apartments** 13.8 %; 5.4 units per acre with 2-3 stories. They offer courtyards as the hinge of communications for each dwelling building which especially provides possibilities of surveillance and social interaction.

5. **Cluster Condos** 44.0%; 17.2 units per acre with 3-4 stories. They are the highest density areas that provide affordable housing units for the relocated Cabrini-Green residents.
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6.3 DESIGN DETAILS

6.3.1 Housing Units

Row houses and courtyard apartments are discussed here as the most significant housing types of William Green Homes.

1. Row Houses Row houses aim to provide affordable housing for low-income, unemployed, and relocated previous Cabrini-Green residents. The row house areas of my plan are designated at the south edge of the site and separated into two parts by a curved inner road.

The north part is the live-work dwelling mix area, which provides local commercial and business services for the neighborhood, including barber shop, salon, restaurant, coffee shop, liquors, career training, insurance, garden maintenance, etc (Fig. 6.8- 6.15). For a typical row house unit, the ground floor is retail or workshop and the top 2-3 floors are residential. Four units share an outdoor stairway and a common gallery which connects every household backyard on the second floor. In the front, there are entrances of ground-floor retails/workshops and outdoor stairways leading to upper-level dwellings.

The south part is for exclusive residential dwellings where each unit has a common front yard and back yard. In both north and south sections, the spaces between rows are landscaped pocket parks for playing, resting, and aesthetic purposes.

Figure 6.8 Section of Row Houses & Pocket Park (Xinxin Chai, 2011)
Figure 6.9 Space Configuration (Xinxin Chai, 2011)

Figure 6.10 Bird’s eye View Plan (Xinxin Chai, 2011)

Figure 6.11 Ground-level Retail & Workshops with Outdoor Seating (Xinxin Chai, 2011)
Figure 6.12 Unit Design (Xinxin Chai, 2011)

Figure 6.13 Backyard View (Xinxin Chai, 2011)
Figure 6.14 Bird-eye View Perspective (Xinxin Chai, 2011)

Figure 6.15 Ground-level Perspective (Xinxin Chai, 2011)
2. Courtyard Apartments

The form of courtyard apartments consists of 2-3 story townhome style dwelling buildings and the public open space in this center. It is a typical space configuration for efficiently improving the surveillance of the neighborhood (Fig. 6.16- 6.22). Townhome style apartments provide low-income residents with sufficient living spaces and modern amenities at a affordable cost. It is a healthy and feasible dwelling style for public housing as well as the aesthetic value. The low height of the building gives people, especially children, the chance to go outside and get to the ground thus increases the chance of physical exercises. The courtyard enclosed by the townhome style apartments serves as the outdoor circulation center leading to the entrance of each building. It also provides green space and the playing space for young kids living in adjacent apartments. Above all, the courtyard space makes it possible and easy for the surveillance from surrounding apartments. Since each unit has a balcony facing toward the courtyard, the eyes on the public spaces increase the sense of safety of the neighborhood. Moreover, the building group of each courtyard apartment forms a small scale neighborhood subdivision which helps people communicate with one another by using the shared courtyard space. In addition, all the courtyard apartments are located at the edge of the central park which gives half of the residents living in courtyard apartments a good view of the park landscape.
CHAPTER 6: ILLUSTRATIVE PLAN

Figure 6.16 Space Configuration (Xinxin Chai, 2011)

Figure 6.17 Unit Design (Xinxin Chai, 2011)

Figure 6.18 Front View and Parking (Xinxin Chai, 2011)
CHAPTER 6: ILLUSTRATIVE PLAN

Figure 6.19 Courtyard and Unit Group (Xinxin Chai, 2011)

Figure 6.20 Section of Courtyard and Dwellings (Xinxin Chai, 2011)

Figure 6.21 Activities in the Courtyard (Xinxin Chai, 2011)
CHAPTER 6: ILLUSTRATIVE PLAN

Figure 6.22 Perspectives of the Courtyard (Xinxin Chai, 2011)

a. Bird’s eye View
b. Ground-level View
c. Second-floor View
3. Surveillance between Buildings

Surveillance of public open spaces between buildings is improved by using semi-private/public spaces as the transition from private indoor housing spaces (Fig. 6.23). It also includes increasing the visible chance of the open space by putting windows on the wall which faces toward the public space. Typically, the outdoor balcony, porch, gallery, door steps, front yard, and back yard are used as the effective way to block crimes and reduce the fear of the crime. Besides, facilities like lights, phones, alarms, and cameras are installed as surveillance supplements.
6.3.2 Central Park and Rain Garden

The central park, transformed from the previously existing public park, Stanton Park, is located at the middle of the entire neighborhood (Fig. 6.24-6.26). It is the central green space of William Green Homes providing residents places to rest, gather, bicycle, walk, and play sports. There are several characteristic features in the park. On the north is a historic church with a parking lot, four basketball fields, and a bus station. In the middle is a picnic pavilion, a movie plaza, a rain garden, and seven picnic spots. At the south edge is a pedestrian-only path leading from the convenience store on the west to the community garden and shopping center on the east. A walking and bicycling path winds north-south through the park connecting the pedestrian path, rain garden, movie plaza, picnic spots, pavilion, basketball fields, and bus station. The variety of activities contained by the central park characterizes it a lively public open space for the residents of William Green Homes. Specially, a rain garden is sited at the southwest corner close to the movie plaza. It is designed as a graded sunken area with smooth slopes and steps for people sitting and wandering. Native deep-root plant species are chosen to help infiltrating storm water runoff and reduce soil erosion. At the same time, the sunshine condition, maintenance requirement and aesthetics of seasonal color mix are also taken into account. Thus, Little Bluestem, Prairie Violet, Black-eyed Susan, Wild Columbine are the main species of the rain garden.
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Figure 6.25 Central Park (Xinxin Chai, 2011)

a. Bird's eye View from South-East

b. Bird's eye View from West
CHAPTER 6: ILLUSTRATIVE PLAN

a. Bird’s eye View

b. Ground-level View

c. Section

Figure 6.26 Rain Garden (Xinxin Chai, 2011)
6.3.3 Pocket Parks

There are thirteen pocket parks within the neighborhood that provide residents mini parks close to their houses (Fig. 6.27-6.30). Pocket parks make use of the small, irregularly-shaped vacant lands between buildings and transform them into the accessible public open spaces. Generally, pocket parks provide neighborhood greenery and social spaces for William Green Homes. The typical pocket park in the neighborhood is dominated by a geometrically divided and graded green square. The shaded trees, smooth slopes and slightly lifted level of the square surface makes it easeful for people to walk and sit on. The geometric form, diverse plant species, pavement and elevation changes increase the visual interest and diversity of the landscape between buildings. Amenities like benches, trash cans, lights, bicycle racks, sitting tables and chairs are also provided for convenience.

Figure 6.27 Typical Pocket Park (Xinxin Chai, 2011)
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Figure 6.28 Pocket Park in Courtyard Apartments Area (Xinxin Chai, 2011)

Figure 6.29 Pocket Park in Row Houses (North) Area (Xinxin Chai, 2011)

Figure 6.30 Pocket Park in Row Houses (South) Area (Xinxin Chai, 2011)
6.3.4 Playing Spaces

Playing spaces in the neighborhood include playgrounds, picnic spots, basketball fields, courtyard, and pocket parks between buildings (Fig. 6.31-6.33). A variety of playing structures are provided in playgrounds close to houses for younger kids. Basketball fields are provided adjacent to the church in the central park for adolescents. Benches and other amenities are also located along the edge of playing spaces. Big shaded trees are planted to create the pleasing microclimate for playing activities.
6.3.5 Communal Places

Communal places of William Green Homes aim to provide public spaces for people to communicate (Fig. 6.34- 6.37). These include indoor public buildings such as restaurants, retail, community centers, churches, and education centers. Outdoor public open spaces including

Figure 6.34 Community Center (Xinxin Chai, 2011)

Figure 6.35 Education Center (Xinxin Chai, 2011)
CHAPTER 6: ILLUSTRATIVE PLAN

Movie Plaza Area

Historic Church Area

Parking Lots

Outdoor Seating

Figure 6.36 Communal Places (Xinxin Chai, 2011)
sitting areas, parking lots, plazas, parks, community gardens and farmers markets all provide people good chances to see, hear, meet, play, work, and have other social interactions with one another.

6.4 SUMMARY

The illustrative plan integrates and balances the previous three alternative plans. It proposes a mixed-land use community for mix-income resident groups and offers a walkable, safe and sociable neighborhood containing residential, educational, commercial, and business functions. The circulation plan tries to establish connections between the neighborhood and other adjacent new developments. The street pattern adopts a closed loop to accommodate vehicle and pedestrian traffic as well as compatible with the surrounding urban fabric. Housing diversity contains five types: townhomes, row houses, courtyard apartment, cluster condos, and multi-
family duplex. Besides the central park in the middle, small public open spaces between buildings, such as pocket parks, courtyards, and playgrounds, aim to provide playing, resting, and surveillance places as well as greenery. Specially, the community garden and farmers market, together with the small parks, movie plaza, parking lots, outdoor sittings, and church area, form the sequence of communal places in William Green Homes.
The last three remaining high-rises in William Green Homes area were torn down as I completed my thesis. The last few residents moved out from the high-rises in December 2010 and the last remaining high-rise was demolished in March 2011. Thus the demolition of old Cabrini Green is complete. It is likely that community housing will be built at the site.

The aim of my redesign is to create a health, safe, and sociable urban community which can be applied to most demolished public housing neighborhoods similar to Cabrini Green in Chicago. The guiding principles for my planning and design are based upon current research on public health, neighborhood safety, and social interaction, Smart Growth and New Urbanism design principles are used in accordance with the stated goals. Highlands’ Garden Village, Lion Creek Crossings, and Willow Oaks are discussed as three precedents upon which my program and design alternatives are based. Following the analysis of the site condition and results of HOPE VI survey, three alternative schematic proposals are presented: health-focus plan, safety-focus plan, and sociability-focus plan. By synthesizing and balancing these plans, illustrative plan of William Green Homes integrated and its land use, public open space, circulation system, and housing diversity are highlighted. Housing units, central park and rain garden, pocket parks, playing spaces, and communal places are designed in detail.

**In conclusion:**

1. A livable community should be designed into **medium density, compact, mixed-use land** that integrates residential, educational, recreational, green spaces, local commercial & retails, local business, and public transit.
2. A successful community should be designed for mix income people groups and thus to provide diverse housing types for different families.

3. For various family needs, housing units consist of a variety of low- and mid-rises: row houses, townhomes, multi-family duplexes, courtyard apartments, and cluster condos. Transitional spaces such as porch, balcony, gallery, doorsteps, front and back yards are added to housing units to contain more lively routine activities.

4. Street and circulation design should be considered to be compatible with urban fabric and connective with adjacent lands as well as accommodate vehicle and pedestrian commands of the site.

5. Pedestrian/bicycle path is one of the effective ways to achieve healthy walkable neighborhood by promoting people going outside.

6. Open space hierarchy, including the large-scale central park, small pocket parks, linear street greenery, basketball fields, courtyards, etc. provides the neighborhood both sufficient outdoor spaces and surveillance opportunities to reduce crimes and fears.

7. Local run public buildings/services of the neighborhood increase the employment opportunities for residents as well as providing communal places to promote social interactions.

8. Community garden and farmers market are necessary techniques to strengthen social ties and collaboration among neighborhood residents.

9. Parking strategies are planned majorly as on-street parking for slow the traffic speed and increase people activities on streets. And parking lots should be considered not only spaces for cars but for people communication.
10. Public transit including **bus route** and **bus stops** should be designated surrounding and within the neighborhood depending on the traffic situation.

My thesis aims to transform an inner city public housing site into a livable neighborhood by employing the concepts of public health, neighborhood safety, social interaction drawing upon principles of New Urbanism and Smart Growth. The redesigned neighborhood can be self-sufficient and promote local economy and employment. My design thesis is an experiment to translate theoretical concepts into professional practices to create healthy, safe, and sociable neighborhoods. The ideas and principles embodied in my proposal can be used in many other similar situations.
REFERENCES


