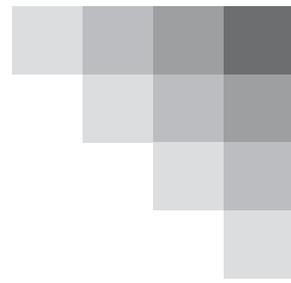


# Fostering Synergy

Andrea Cooper

Spring 2012

Andrea Cooper

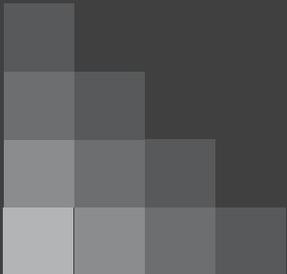


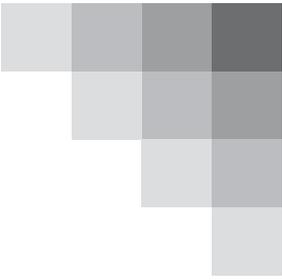
# Contents

- Project Overview
- Guiding Principles and Goals
- Statistics
- Parameters
- Stakeholders
- User Relationship Diagrams
- Site Analysis
- Site Massing
- 2D Drawings
- Renderings
- Precedents
- References

# Fostering Synergy

Fostering Synergy will create a community based support system by pairing young mothers outgrowing the foster care system with community matriarchs in need of companionship and minimum physical assistance. Each generation has social and physical needs that can be eased through the Fostering Synergy support system.

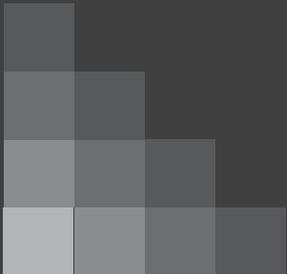


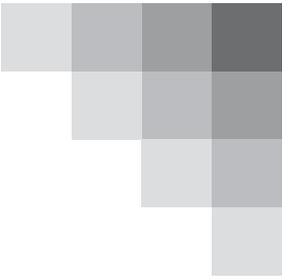


# Fostering Synergy

Fostering Synergy support women in their most difficult stages of life. A young mother exiting the foster care system will be paired with a matriarch to form a living pod. The pair will help each other with daily activities and provide companionship and support. The senior woman will provide childcare services and parenting advice, while the young mother attends classes and/or works. In return the young mother will help with cleaning and grocery shopping, or any activity that may be physically stressful to the matriarch. The development will be comprised of multiple living pods to create a support community. The community will provide a network of resources that go beyond the individual pair, branching out to other members of the community as needed.

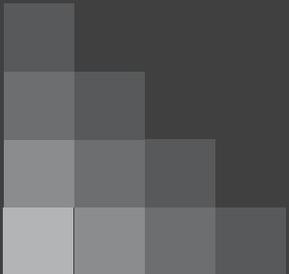
The intention of the project is to create a community that fosters and supports social interaction and personal growth. The support of the community also helps by providing safe child care and help with daily activities such as cooking and cleaning. The intention of the development is to provide a safe living environment for all age groups that helps the inhabitants develop a sense of financial security and personal growth.

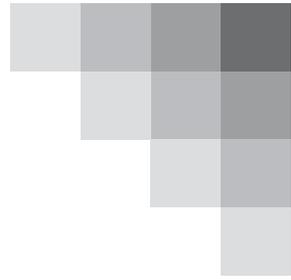




# Fostering Synergy Goals

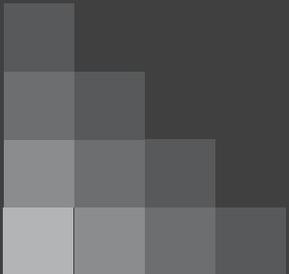
1. Foster education and a sense of community for women in need.
2. Respond to the needs of young mothers exiting the foster care system.
3. Create a community that will remain significant for generations.
4. Improve the physical and emotional health of women and children.





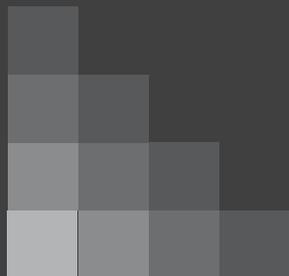
# Fostering Synergy Intentions

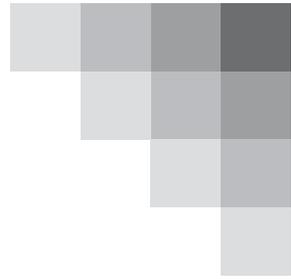
Social Interaction  
Support Network  
Personal Growth  
Safe Childcare  
Education  
Economic Security  
Emotional Health





# Poverty Statistics, Single Household





A one person household in the US living below the federal poverty level makes less than

**\$10,890**

each year.

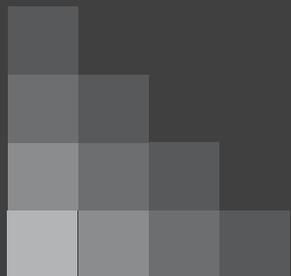


In the United States

**9.7%**

of those over the age of 65 live below the poverty level.

# Poverty Statistics, Family





A household of two or more in the United States living below the federal poverty level makes less than

**\$14,710**  
each year.

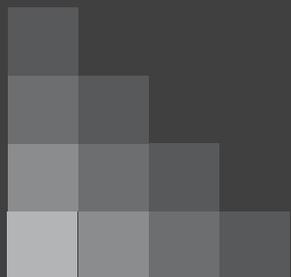


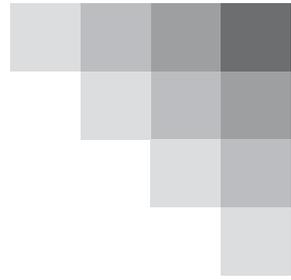
In the United States

**26.6%**

of single parent households live below the poverty level.

# Foster Care Statistics





In 2008, 10% of youths exiting foster care, or

**29,000**

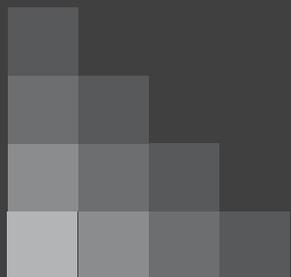
teenagers were emancipated from the system with no permant home or steady source of income.

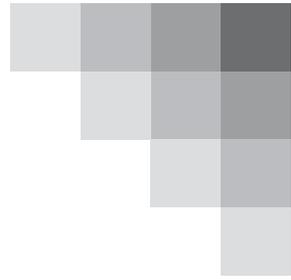


Only  
**1%**

of Foster Kids are transitioned into supervised independant living.

# Foster Care Statistics





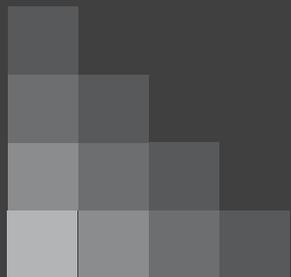
7% of Foster Kids are in foster care for  
**5 years**  
or longer



20% of Foster Kids are  
**16 years**  
old or older



# Foster Care Statistics





As of 2008,

**51%**

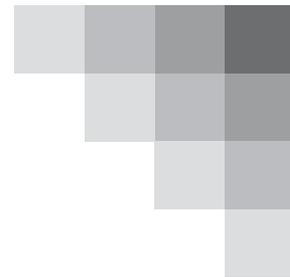
of young women in the foster care system had one or more children before age 19.



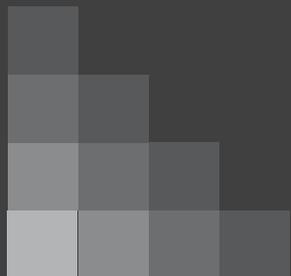
Over

**25%**

of children whose parents were in the foster care system for 1 year or longer are placed in foster care for some length of time.



# Elderly Statistics





An estimated

**30%**

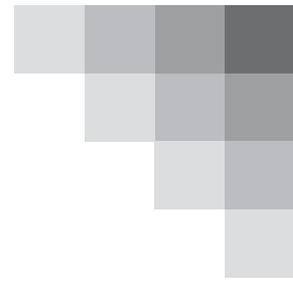
of the elderly live in social isolation.



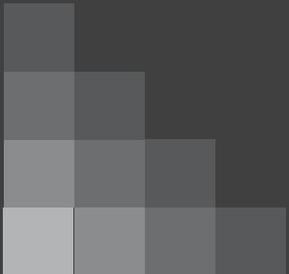
There are over

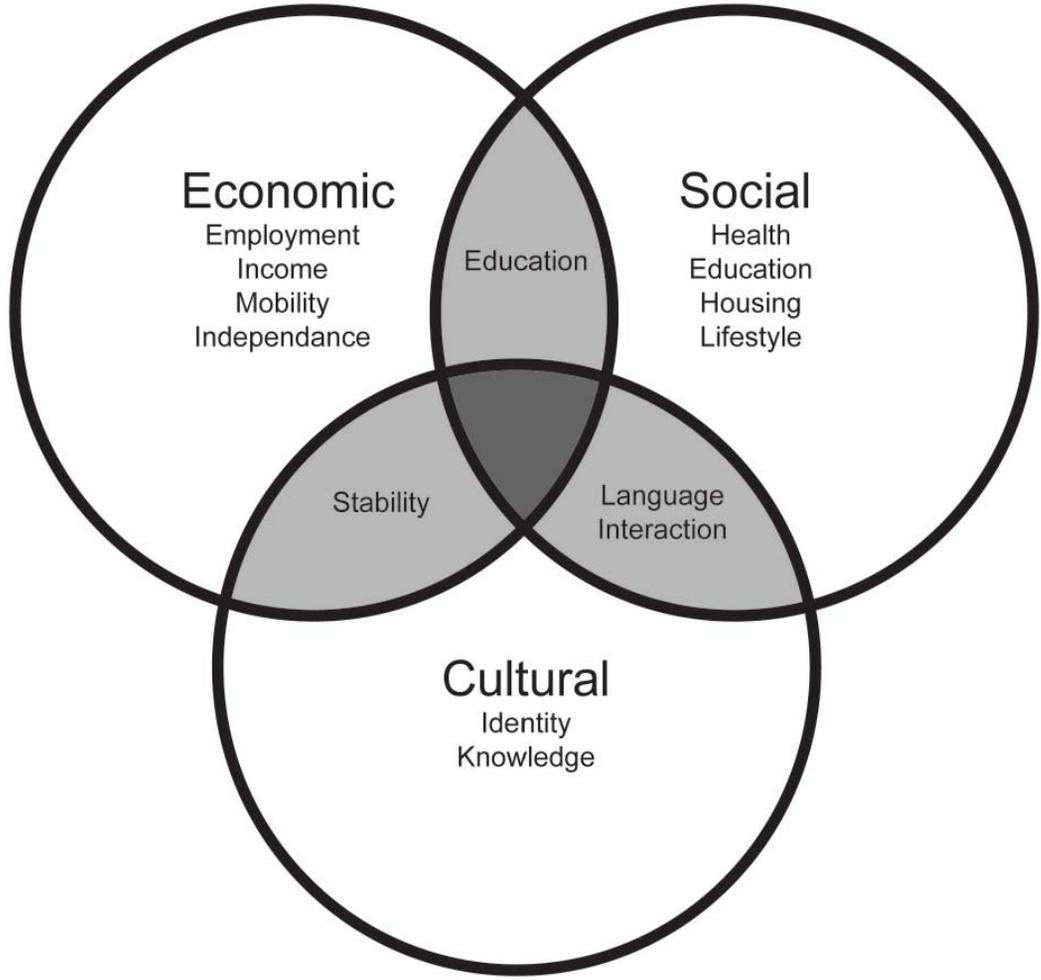
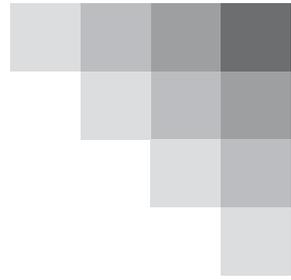
**40 Million**

people over the age of 65 living in the United States.



# Project Parameters





# Stakeholders

## Leadership:

- Developer(s)
- Investors
- Community Leadership

## Direct:

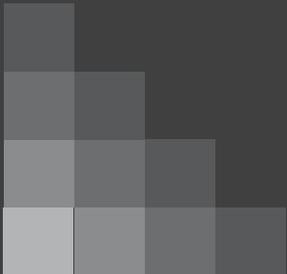
- Foster Care Residents with Children
- Matriarchs
- Residents' Children
- Employees

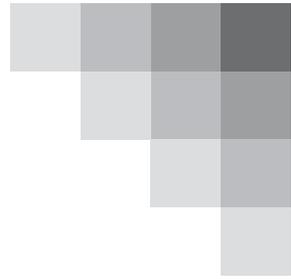
## Indirect:

- Neighborhood Residents
- Neighborhood Businesses
- Visitors
- Residents' Family and Friends
- Residents' Employers
- Residents' Teachers

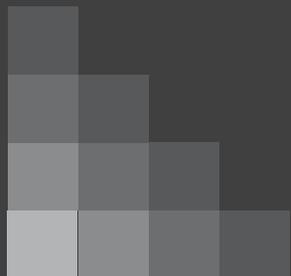
## General:

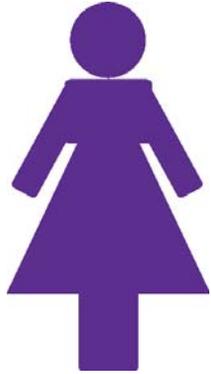
- City of Chicago





# User Descriptions

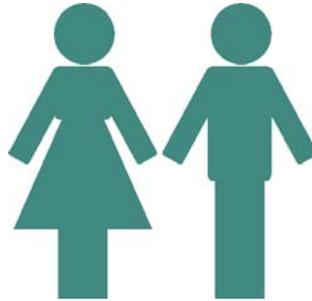




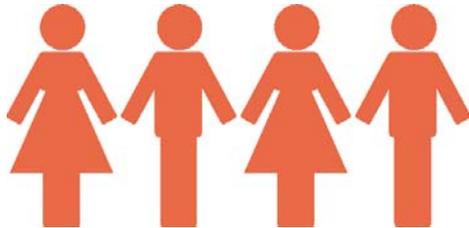
The Matriarch is an experienced, independent woman. Her role is to provide guidance and support to the young mothers. She acts as a role model for the young mothers the children, while strongly influencing the upbringing of the children in both the family unit and the community.



The Young Mother is a young woman, recently emancipated from the Foster Care system. She has one or more children. Her role is to provide companionship to the Matriarchs, provide a safe family atmosphere for her child(ren), and become a fully functioning member of society.



The Children of the young Mothers are being raised in a collaborative community in hopes of breaking the cycle of the children of foster care children. They are under the direct care of the Young Mother and the Matriarch.

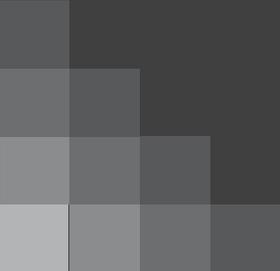


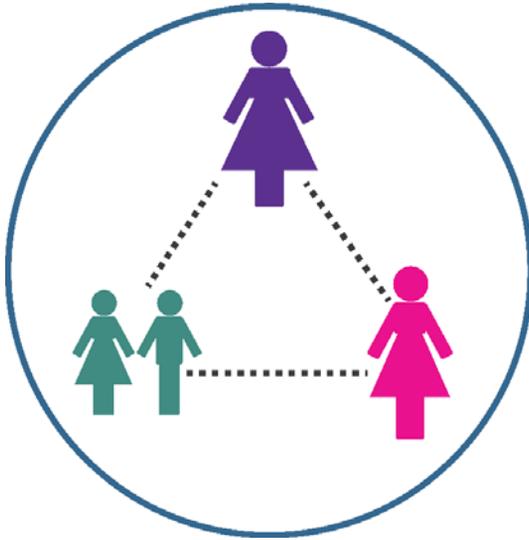
The Staff are directly responsible for community operations. They provide direct support and care for all occupants, while also offering services to the surrounding neighborhood.



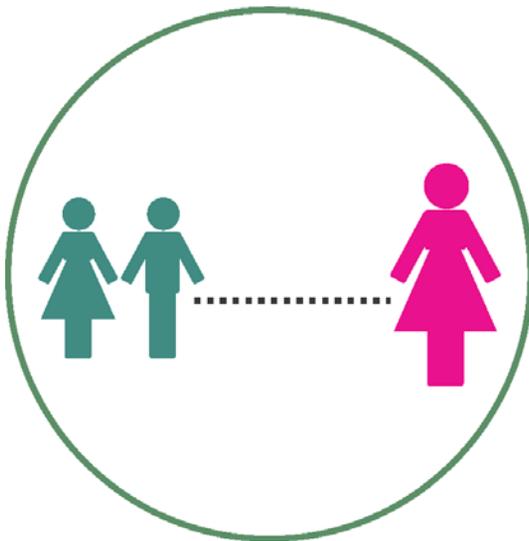
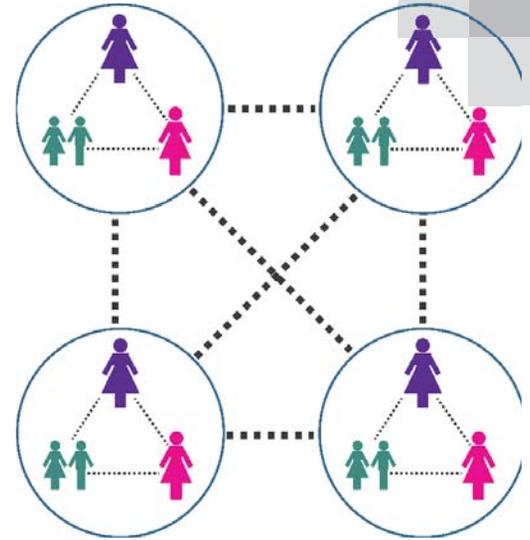
The Community includes those living in the development and those living in the surrounding neighborhoods. They stand to benefit from the success of the development. Their participation in events is encouraged and appreciated.

# Resident Relationships

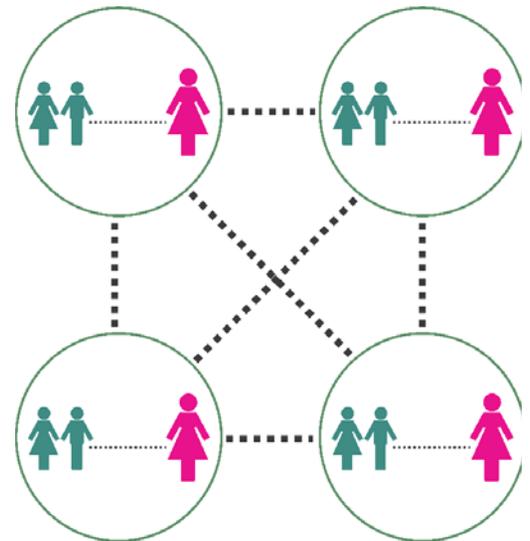




The collaborative housing units consist of a matriarch, a young mother, and her children. Family units depend on the support from within the unit, but greatly benefit from the support of the development. Family units interact to provide support and friendship.



The transitional housing units consist of a young mother and her children. Each family unit is an independent entity, but still still benefits from the support of the development. Family units interact to provide support and friendship.



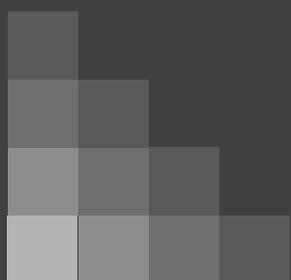
## User Relationships

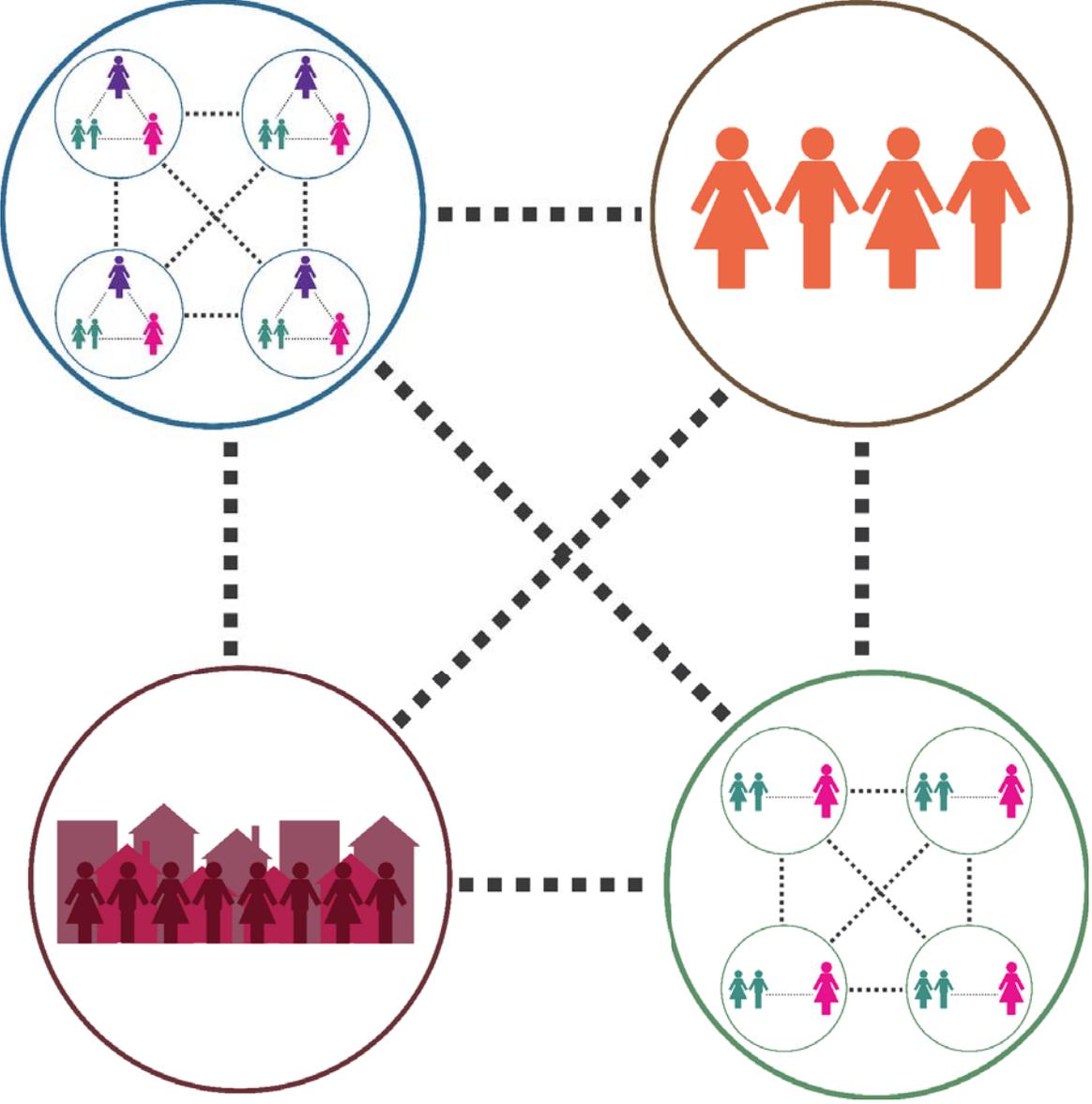
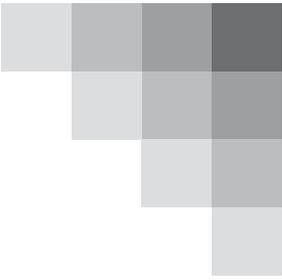
# Syn·er·gy

noun

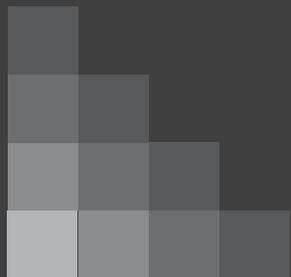
Two or more things working together to produce a result not independantly obtainable; the interaction of elements that when combined produce a total effect that is greater than the sum of the individual elements or contributions

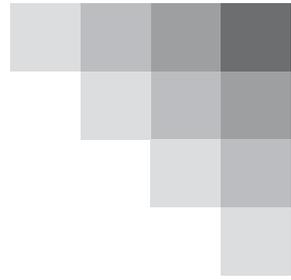
From the Greek word *synergia* from *synergos*, meaning “working together”





# Chicago Climate





Chicago, Illinois

Latitude: 41.9

Longitude: 87.65

Four Distinct Seasons:

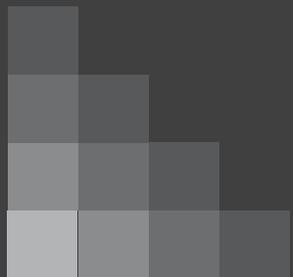
Cold, windy winters

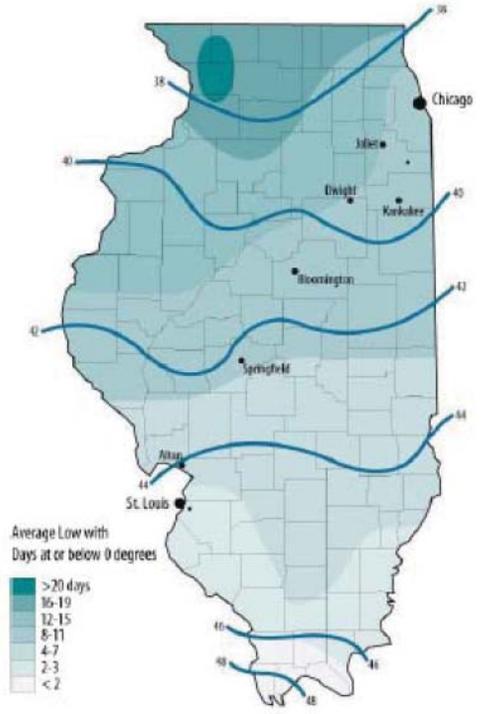
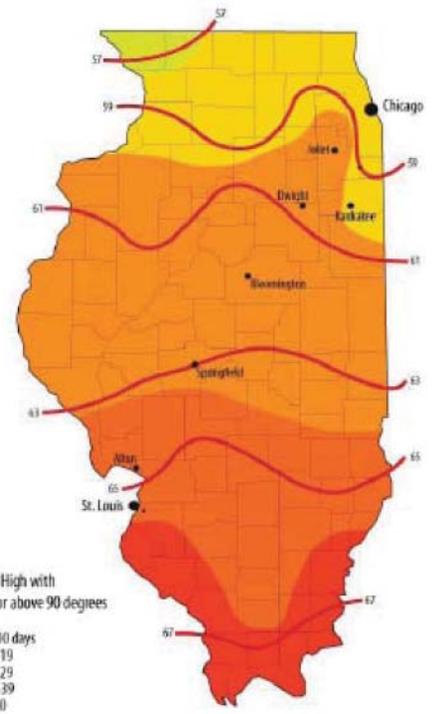
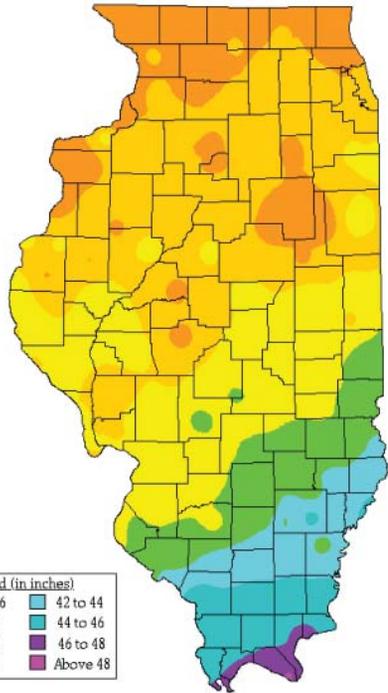
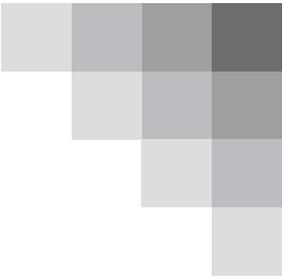
Mild spring

Hot, humid summer

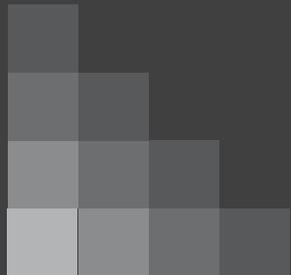
Crisp, short fall

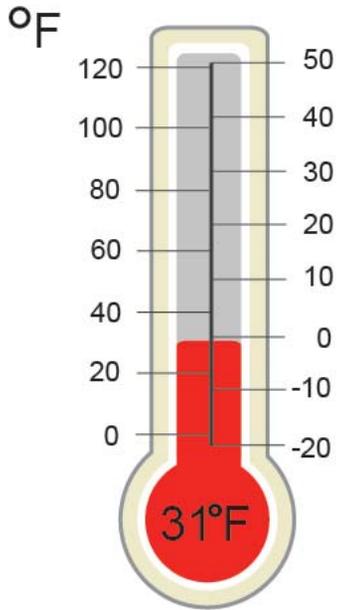
# Illinois Climate



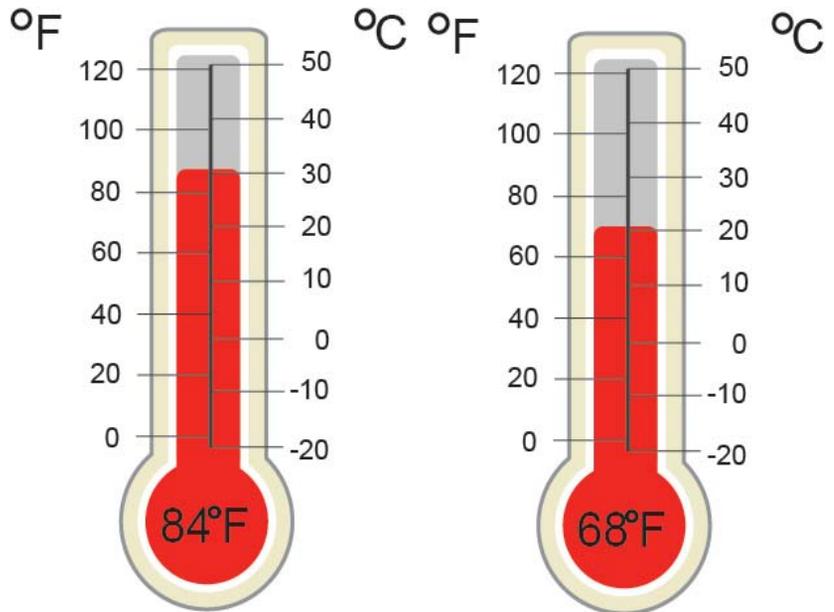
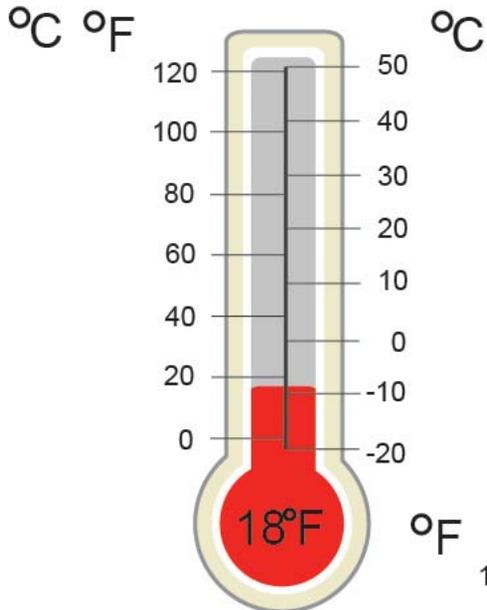


# Chicago Climate-Temperatures, High/Low



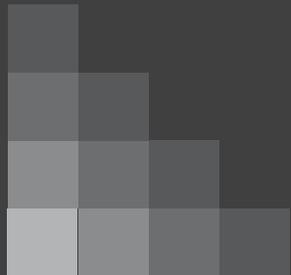


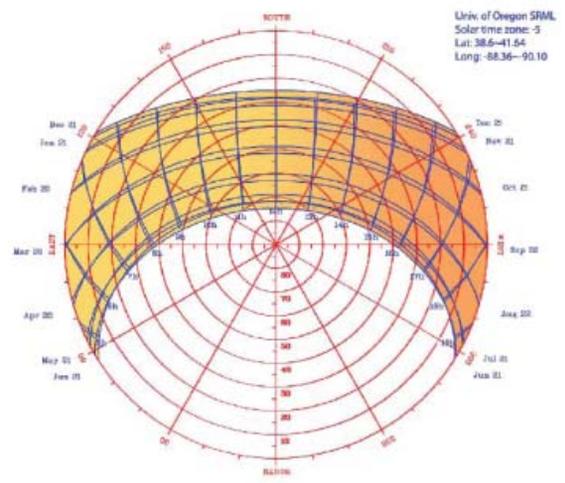
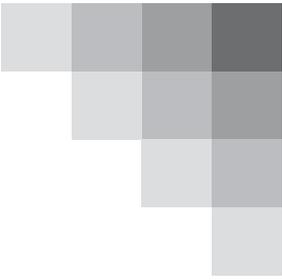
Average High/ Low Temperature, January



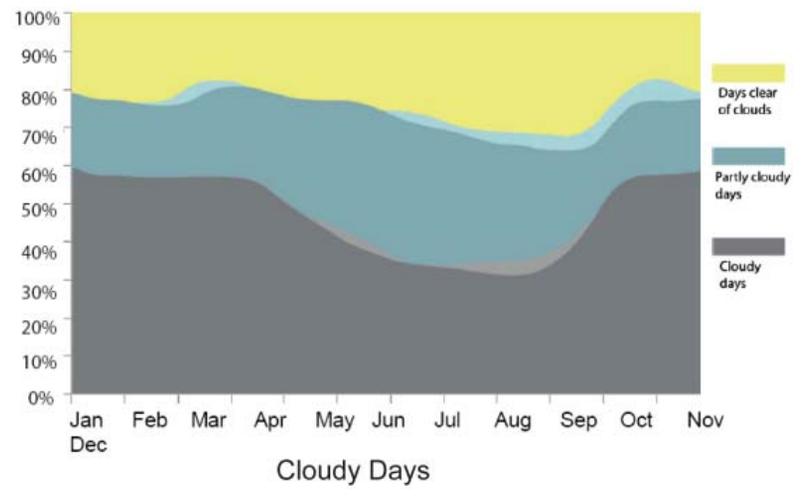
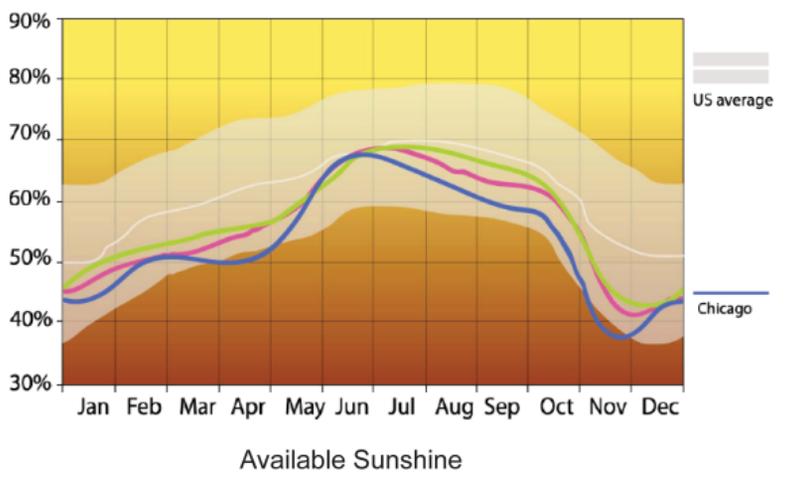
Average High/ Low Temperature, July

# Chicago Climate-Sunshine and Rainfall

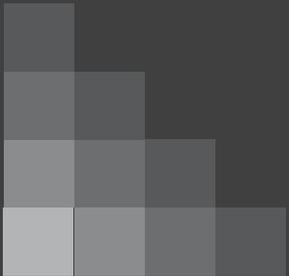


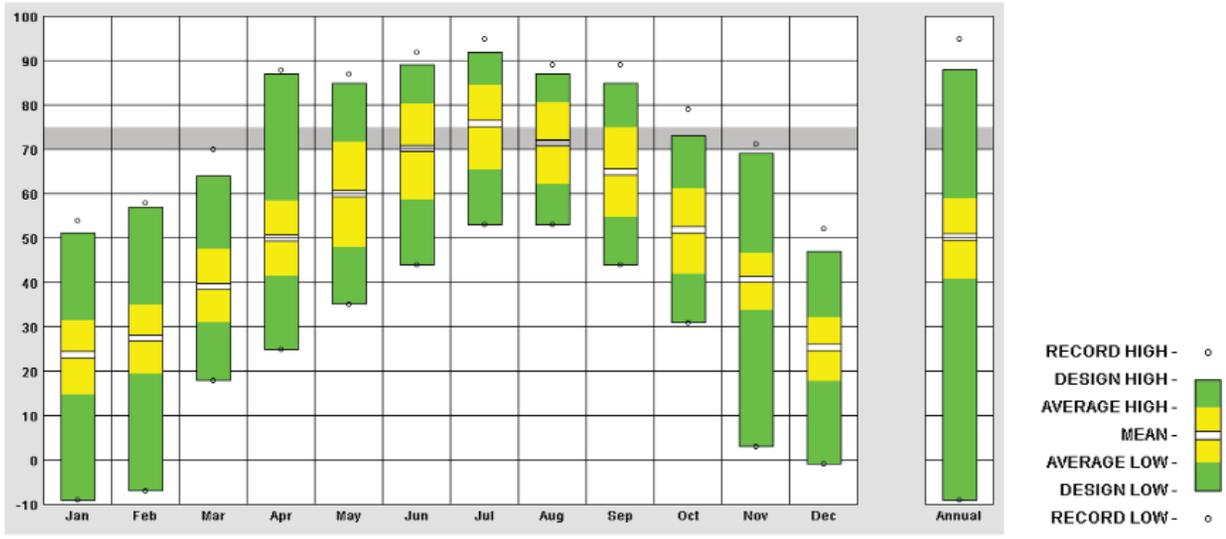
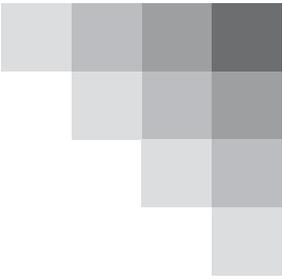


Sunpath Diagram

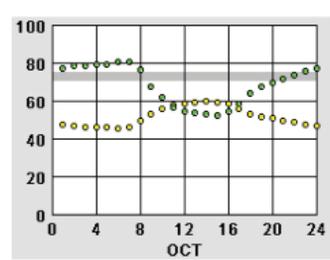
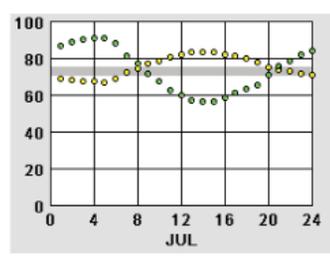
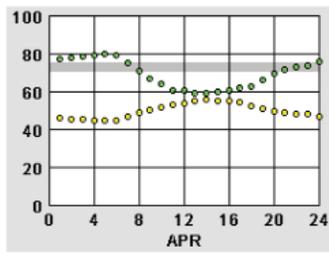
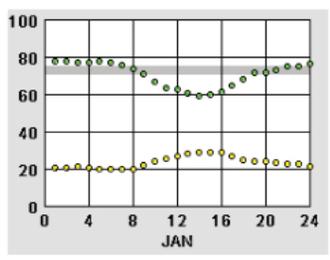


# Chicago Climate-Temperature and Humidity





- RECORD HIGH - ○
- DESIGN HIGH - [Green Box]
- AVERAGE HIGH - [Yellow Box]
- MEAN - [White Box]
- AVERAGE LOW - [Yellow Box]
- DESIGN LOW - [Green Box]
- RECORD LOW - ○

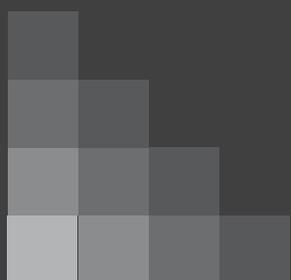


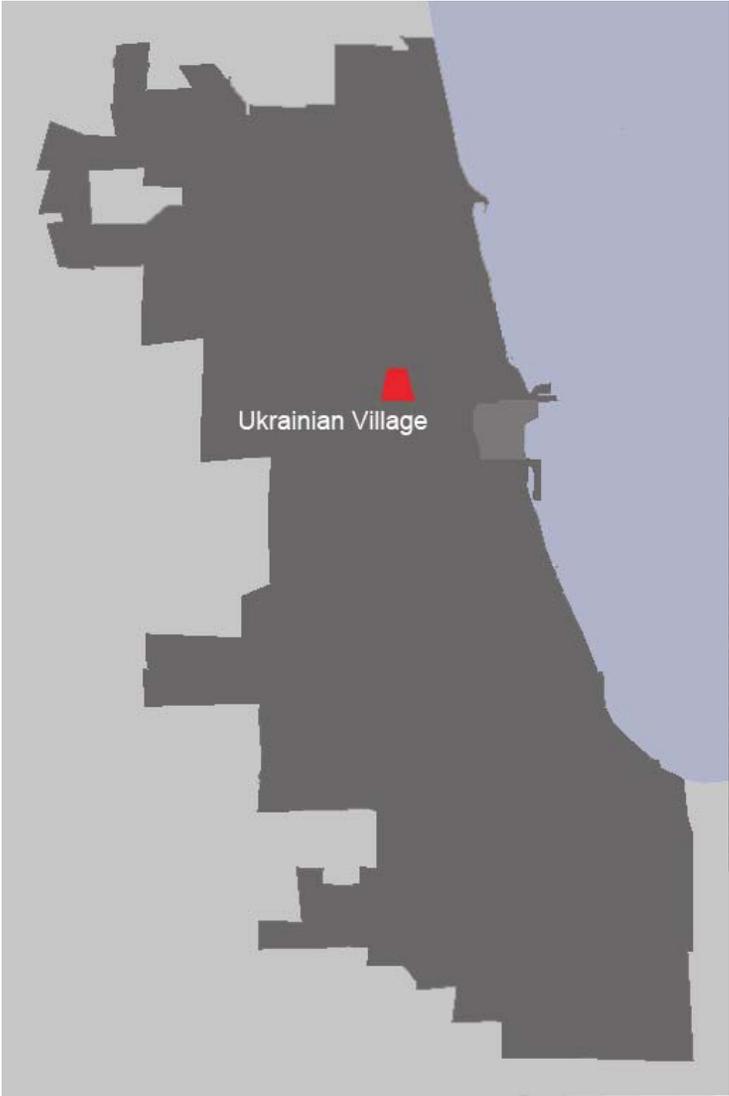
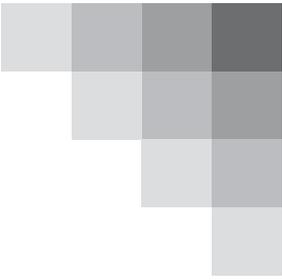
- Dry Bulb ○
- Humidity ●
- Comfort Zone [Grey Box]

# Site Parameters

## Neighborhood:

- Within walking distance to public transportation (1 train or 2 bus)
- Existing neighborhood fabric with some void space available for development
- Available neighborhood amenities within walking distance
- Accessible to healthcare
- Accessible to job or education corridor (via walking or public transit)
- Close to CPS or other school system
- Close to current residence of potential clients
- TIF zone a plus
- Well lit neighborhood
- Well maintained by local residents and City
- Some crime is to be expected, type and frequency of crime to be analyzed
- Strong social connection between residents





# Site Parameters

## Site:

Large continuous lot, mixed use zoning (or availability to change zoning)

Space for parking (street or onsite)

Not adjacent to heavily vandalized or deteriorating buildings

Able to orient residential entrance off commercial corridor

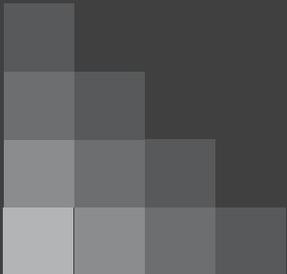
Potential for expansion

Within existing city infrastructure (water, sewage, garbage removal, electric, telephone/ cable, gas)

Close to (if not adjacent to) Emergency Snow Route

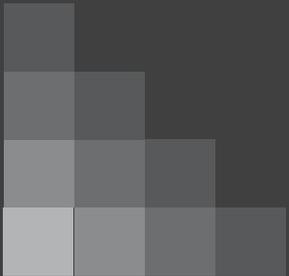
View of surrounding community in minimum of one direction

Accessible from more than one direction (no dead end streets)



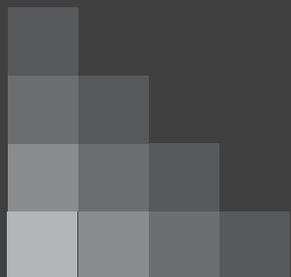


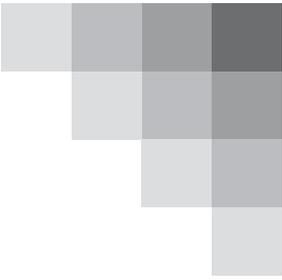
# Void vs Fill



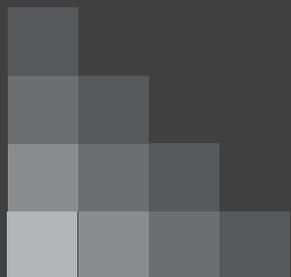


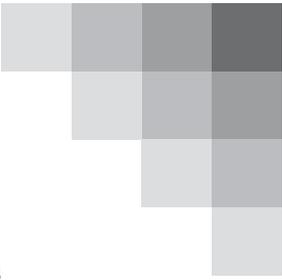
# Public Transportation



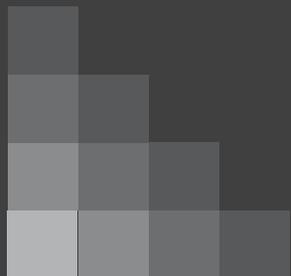


# Neighborhood Asset Map



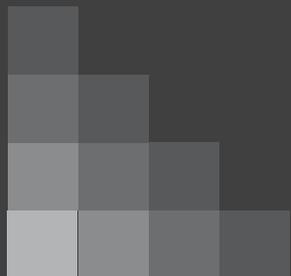


# Neighborhood Conditions



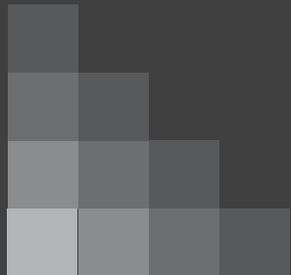


# Neighborhood Conditions



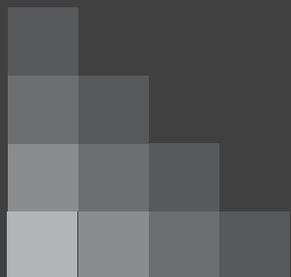


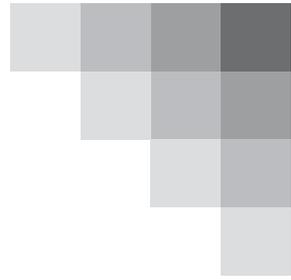
# Existing Site Conditions



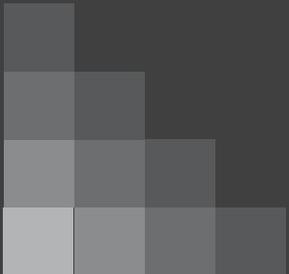


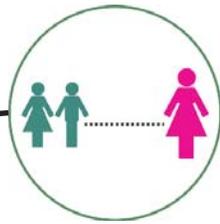
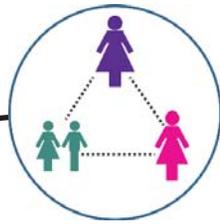
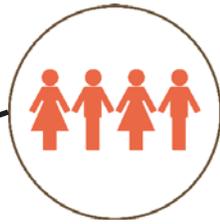
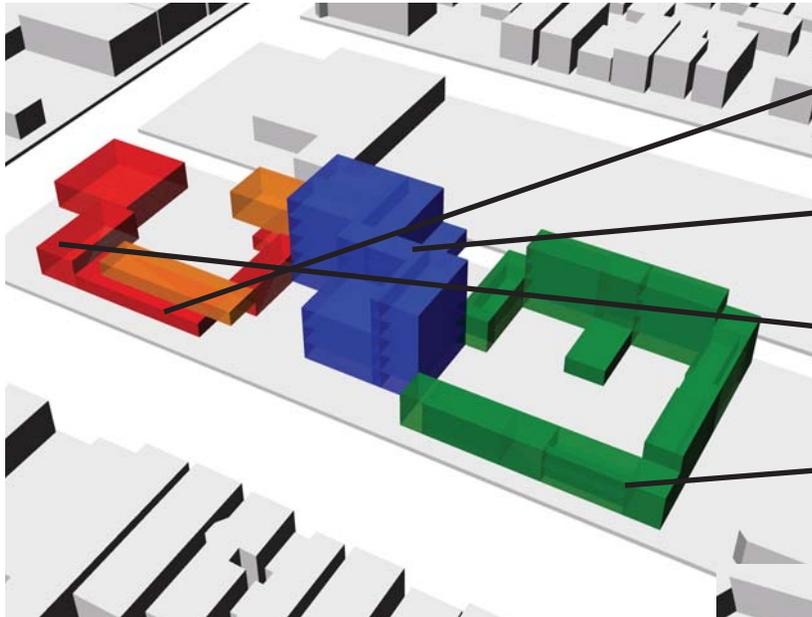
# Study Models





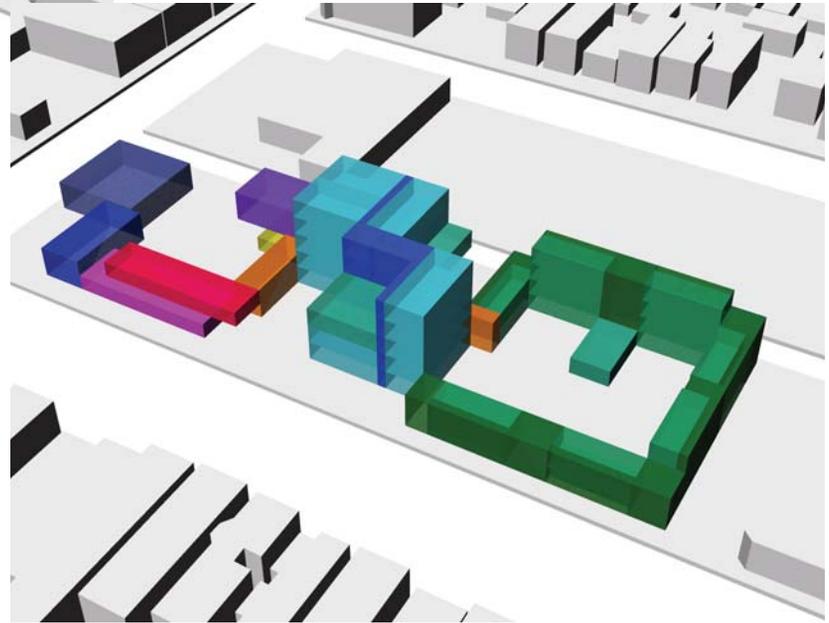
# User and Program Diagrams





- Community Center Lobby
- Multi-purpose Room
- Classrooms and Consult Rooms
- Administration
- Child Care
- Staff Housing
- Community Corridor

- Collaborative Housing Units
- Collaborative Housing Corridors
- Play and Amenity Space
- Transitional Housing Units
- Transitional Housing Corridors

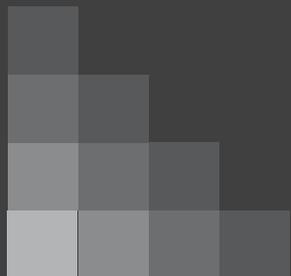


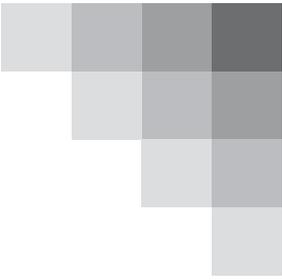
Massing Diagrams

Privacy

Movement

Sound





	Public vs Private	Security	Sound	Daylight
Community Center Lobby	Light Blue	Light Red	Light Green	Light Yellow
Community Multi-Use Space	Light Blue	Light Red	Light Green	Light Yellow
Classrooms/ Consult Rooms	Light Blue	Light Red	Light Green	Light Yellow
Administration	Teal	Dark Red	Dark Green	Light Yellow
Staff Housing	Dark Teal	Dark Red	Dark Green	Light Yellow
Child Care	Teal	Dark Red	Dark Green	Light Yellow
Collaborative Housing Units	Dark Teal	Dark Red	Dark Green	Light Yellow
Collaborative Housing Bedrooms	Dark Teal	Dark Red	Dark Green	Light Yellow
Collaborative Housing Corridors	Teal	Dark Red	Dark Green	Light Yellow
Ammenity Space	Teal	Light Red	Light Green	Light Yellow
Transitional Housing Units	Dark Teal	Dark Red	Dark Green	Light Yellow
Transitional Housing Bedrooms	Dark Teal	Dark Red	Dark Green	Light Yellow
Transitional Housing Corridors	Teal	Light Red	Light Green	Light Yellow



Private

Public



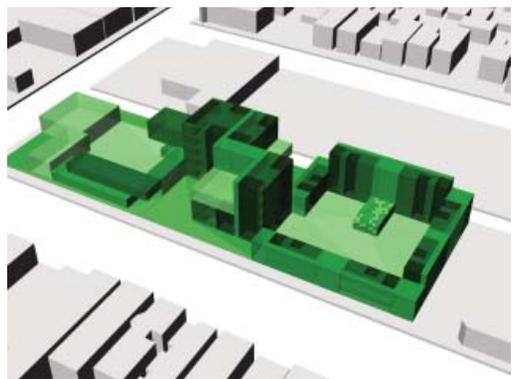
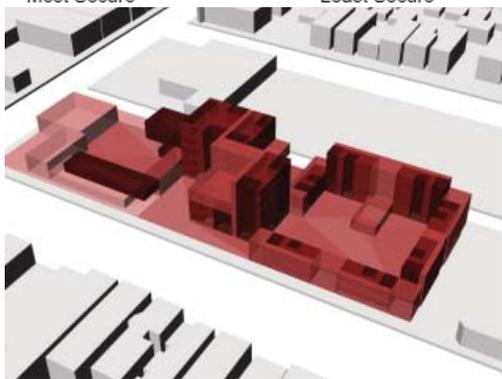
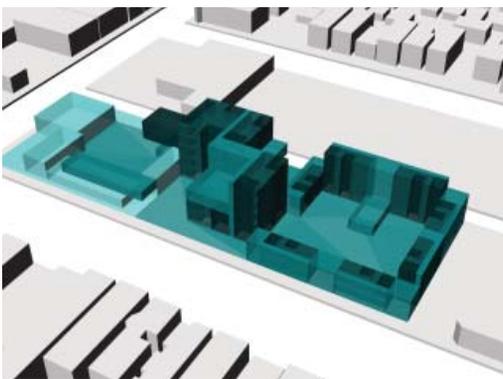
Most Secure

Least Secure



Loud

Quiet



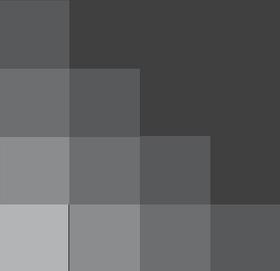
# Massing Diagrams

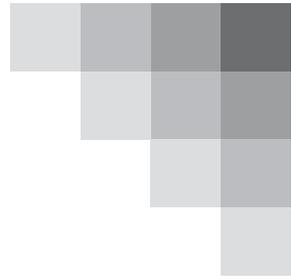
Daylight

Fall Morning

Fall Noon

Fall Evening

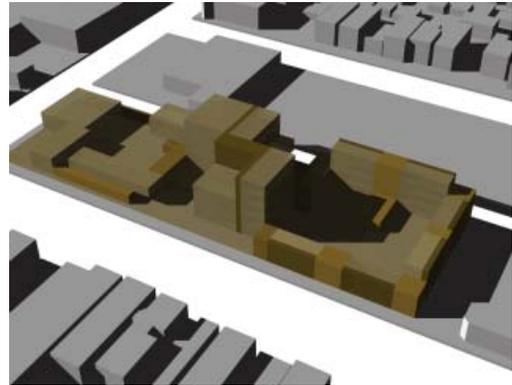
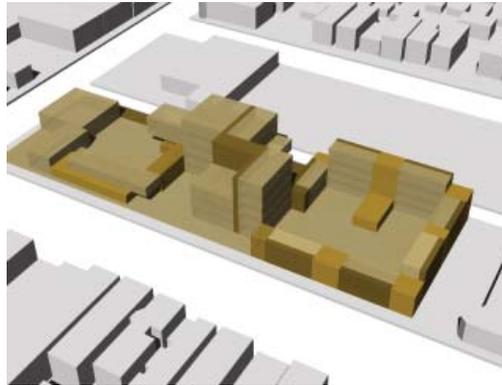
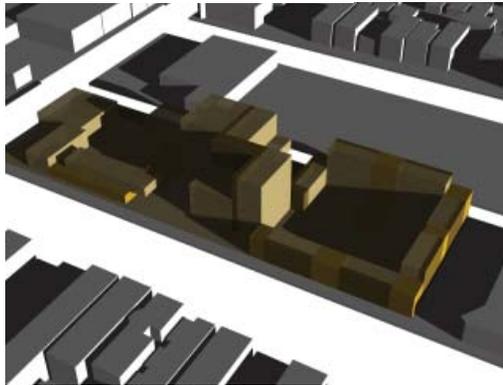




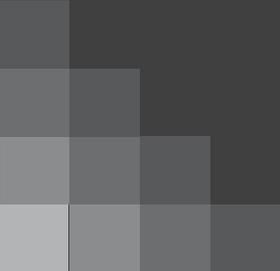
	Public vs Private	Security	Sound	Daylight
Community Center Lobby	Light Blue	Light Red	Light Green	Light Tan
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Transitional Housing Bedrooms	Dark Teal	Dark Red	Dark Green	Light Tan
Transitional Housing Corridors	Teal	Light Red	Light Green	Light Tan

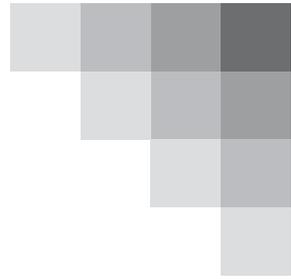


Least Daylight      Most Daylight

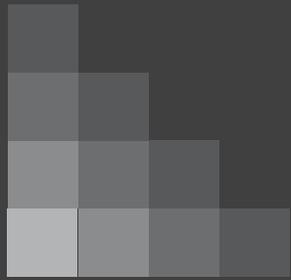


# Birds Eye View from South



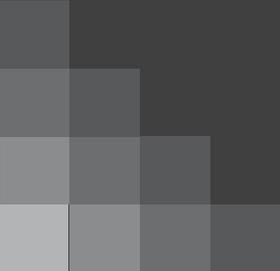


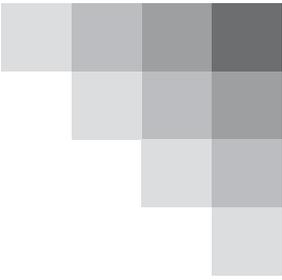
# Site Use Diagram





# Site Plan with Ground Floor Plan



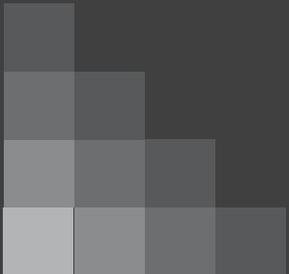


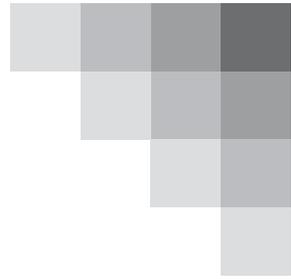
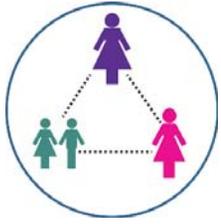
# Collaborative Housing Unit Plan

3+ Occupants

19 Units in Development

1,054 SF



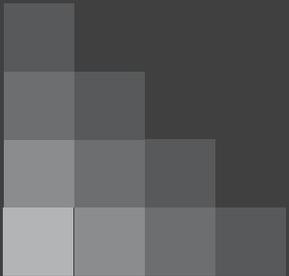


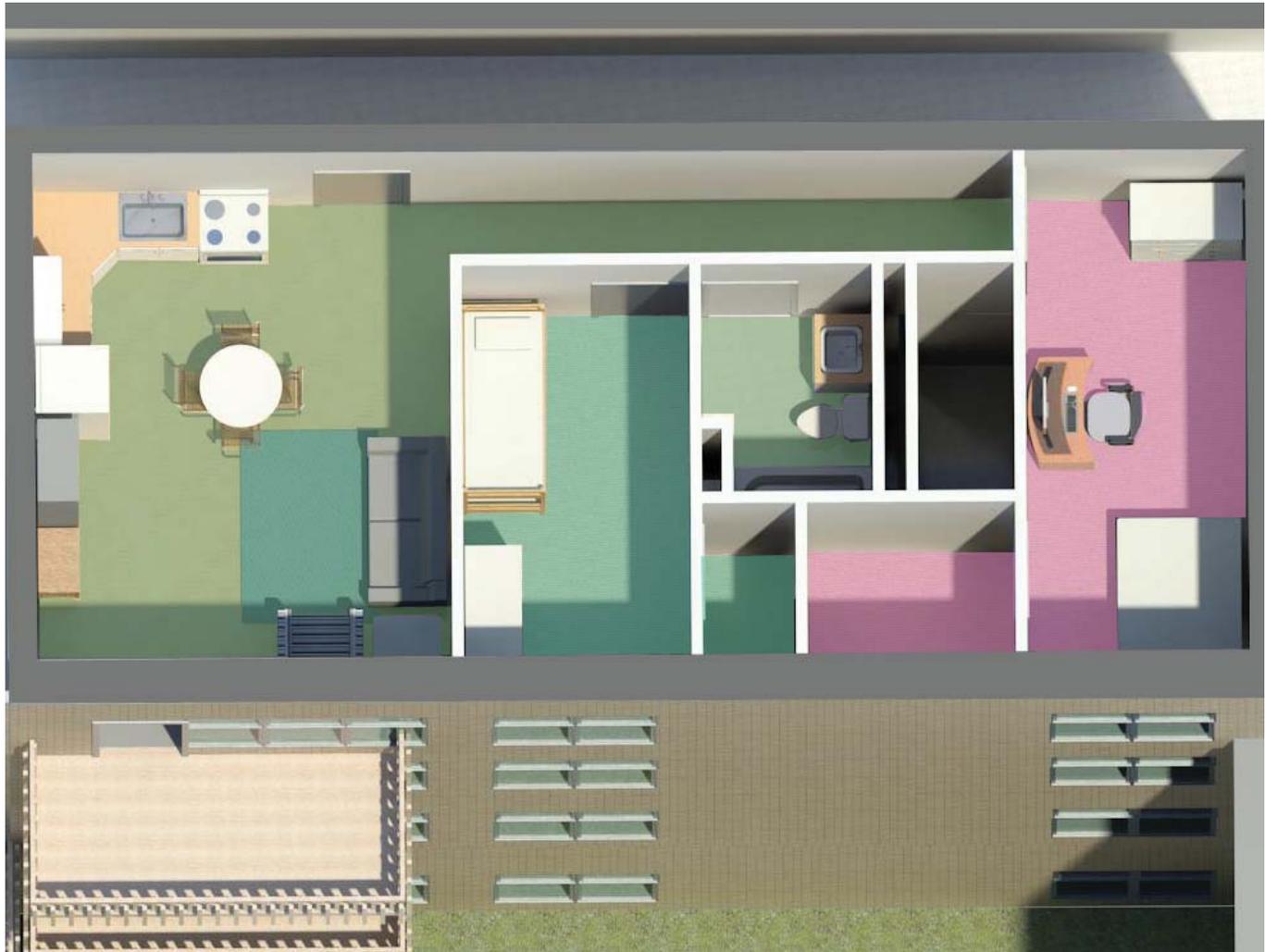
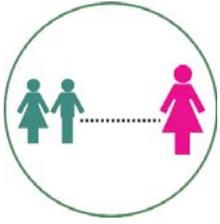
# Transitional Housing Unit Plan

2+ Occupants

18 Units in Development

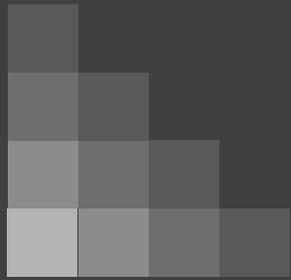
790 SF





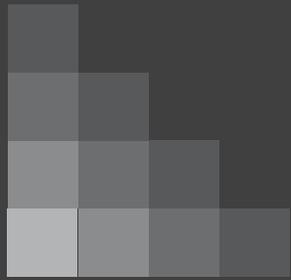
# Site Massing Model

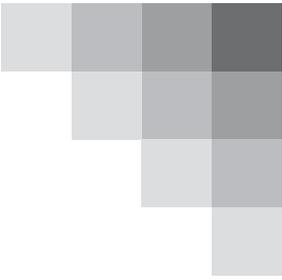
## View from South West



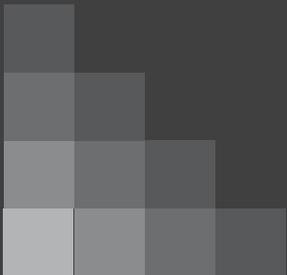


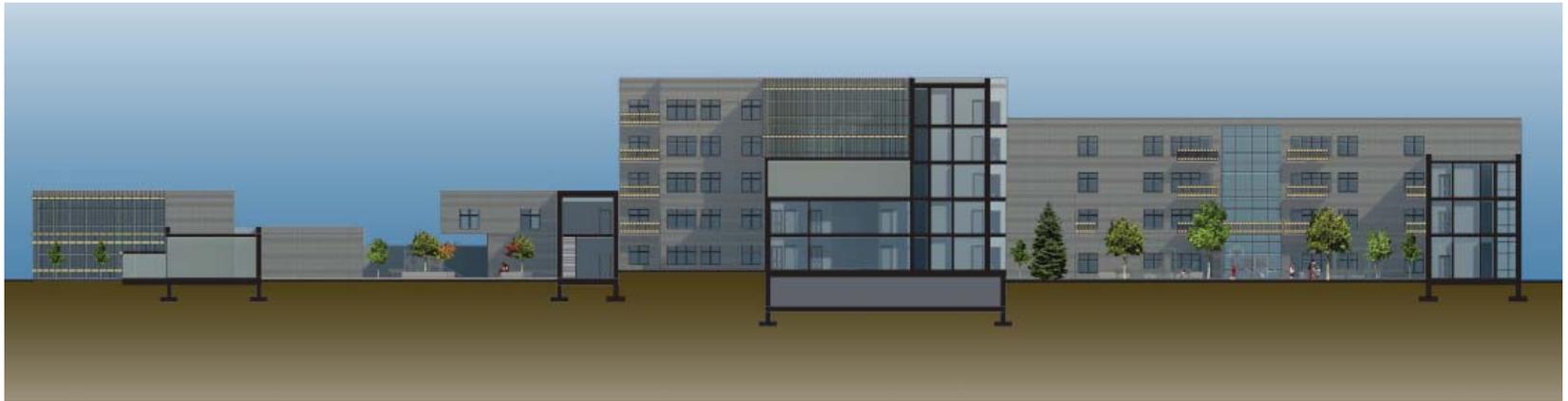
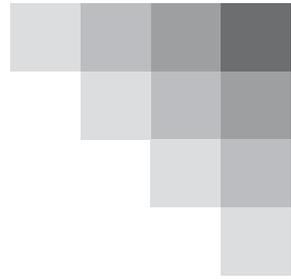
# Exterior Elevation, South



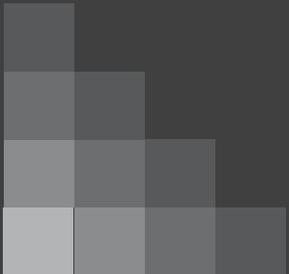


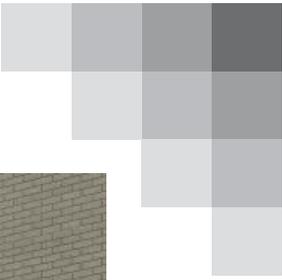
# Building Section



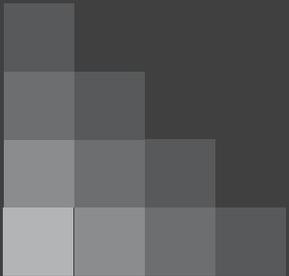


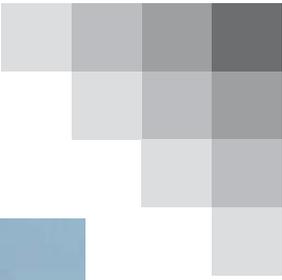
# Community (west) Courtyard



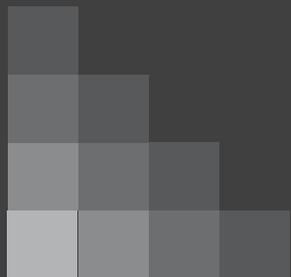


Residential Entrance  
View looking East



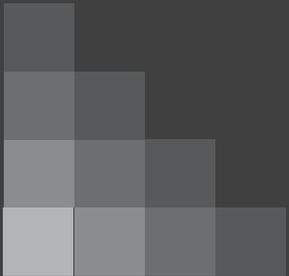


Residential Entrance  
View looking West





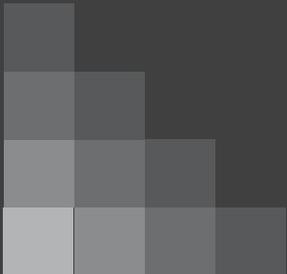
# Residential (east) Courtyard View from 2nd Floor Balcony





Game Room

Transitional Housing Building





## Precedents- PCC Austin Family Health Center

The PCC Wellness Center Family offers free healthcare to low income families and individuals. The facility was designed to provide a variety of services including mental health, dental and reproductive health. The center strives to improve the lives of those living within their community through healthcare.

PCC Wellness is a Chicago based not-for-profit organization focusing on the health needs of the local community. The design of the 18,000 square foot, 2 story facility includes private exam rooms, a state of the art dental examination facility, a mental health counseling area, and classrooms. The facility also includes ground source heat pumps, SIPs panels, solar hot water heating, and a Cradle-to-Cradle silver certified aluminum curtain wall system. During construction, the general contractor partnered with Kingdom Community Construction to match skilled labors in the Austin neighborhood with jobs of the PCC project. The project's intention was to improve the local economy by matching local workers with available jobs. The project was designed and constructed using the principles of the Triple Bottom Line: social, economic, and environmental.

The PCC Austin Family Health Center opened in early 2009. The facility includes 10 exam room and 4 dental exam stations. The facility was designed by MDT Architecture and Interiors with energy systems design by Architectural Consulting Engineers.

### Sources:

PCC Austin Family Health Center. Mdtarch.com. 2010. September 20, 2011



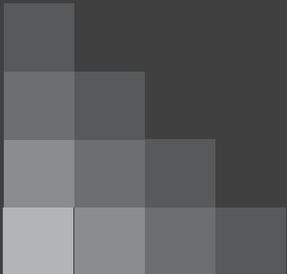
## Precedents- Hubertus House

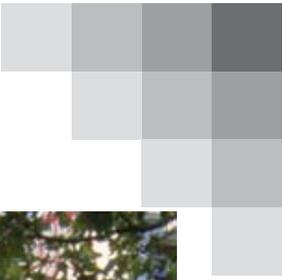
The Hubertus House was designed by Aldo Van Eyck and built in 1980. Also known as the Mother's House, the project is located in Amsterdam. The project serves as temporary housing for single mothers and their children.

The bright and colorful facade create a cheerful, peaceful atmosphere. The structure is six stories with residential units and play space. The main staircases can be seen from the main street, but residents must pass through the front courtyard to access the residential entrance. The adult spaces are located closer to the street, creating a protective barrier for the children's spaces.

Sources:

[www.greatbuildings.com](http://www.greatbuildings.com)





# Precedents- WIU Multi Cultural Center

The Western Illinois Multi-Cultural Center was designed to be a meeting space for multiple cultural groups across the WIU campus. The building serves to unite the campus and provide a functional and beautiful space for minority campus organizations. Western Illinois University serves to provide academic excellence, educational opportunity, personal growth and social responsibility. The University fosters these values through academics, campus organizations, and social events. University staff observed that although these groups and events were sponsored and encouraged by WIU, segregation still existed between campus organizations, specifically campus minority organizations. To solve this problem the University commissioned the design of a Multi-Cultural Center.

The Center brings together minority campus organization in a community center the entire campus can appreciate. The building provides academic spaces, administrative spaces, conference spaces, and gathering spaces. The Multi-Cultural Center allows minority organizations to continue to serve students and faculty, while sharing resources and reaching out to an ever growing academic community.

The Western Illinois University Multi-Cultural Center was designed by Nagle Hartray. The 21,000 square foot facility opened to the public in 2009. The \$5.9 million dollar facility is intended to serve and education the community of Western Illinois University.

## Sources:

Multicultural Center Western Illinois University. Nagle Hartray Architecture. 2001. web. September 18, 2011

WIU Student Services. Western Illinois University. 2011. web. September 18, 2011



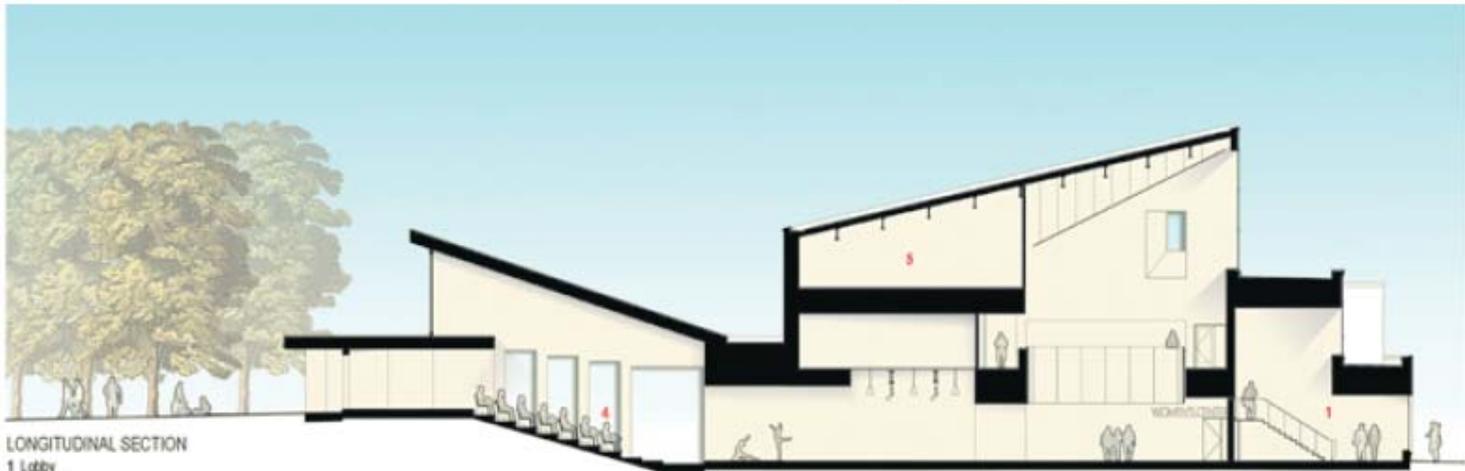
**FIRST FLOOR PLAN**

- 1 Lobby
- 2 Women's Center Lounge
- 3 Swedish Broke Lounge
- 4 Case Labra Lounge
- 5 International Student Lounge
- 6 Activity Room
- 7 Dance/Multipurpose Room
- 8 Computer Lab
- 9 Kitchen
- 10 Storage



**SECOND FLOOR PLAN**

- 1 Swedish Broke Student Organization
- 2 Women's Center
- 3 Case Labra and International Students
- 4 Library
- 5 Board Room



**LONGITUDINAL SECTION**

- 1 Lobby
- 2 Activity Room
- 3 Dance/Multipurpose Room
- 4 Future Addition
- 5 Mechanical

# Precedents- Cathedral of Our Lady of Chartres

The Chartres Cathedral was a religious, economic, and social focal point of Medieval France. The building served as the principle gathering place for all social classes and the structure's height served as a reminder to the surrounding town of the Church's power and mission.

The Chartres Cathedral was constructed to serve as a place of worship for the Roman Catholic Church. The Church's power went beyond religious worship and stretched to economic, social, political, and cultural power. The Cathedral's main nave served as a market place, a shelter, a venue for town meetings, and a destination for pilgrims. The Cathedral housed a school and served as a medical shelter for those suffering from St. Anthony's fire.

The Cathedral served as a community center for the town of Chartres. The intentions of the building went beyond religious worship. The design and construction of the Cathedral reflected the beliefs and abilities of the community. The church's main corridor was a multi-use space capable of adapting to the needs of the community. The beauty and flexibility of the structure allowed it to stand the test of time and remain relevant to modern culture.

The Chartres Cathedral was built in Chartres, France and completed in 1250 AD. Four previous churches have occupied the Cathedral's site, all destroyed by war or acts of nature. The current church, the seat of the bishop of Chartres, nave measures 430 feet in length with a maximum height of 370 feet.

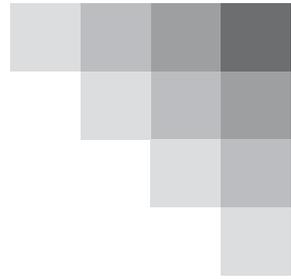
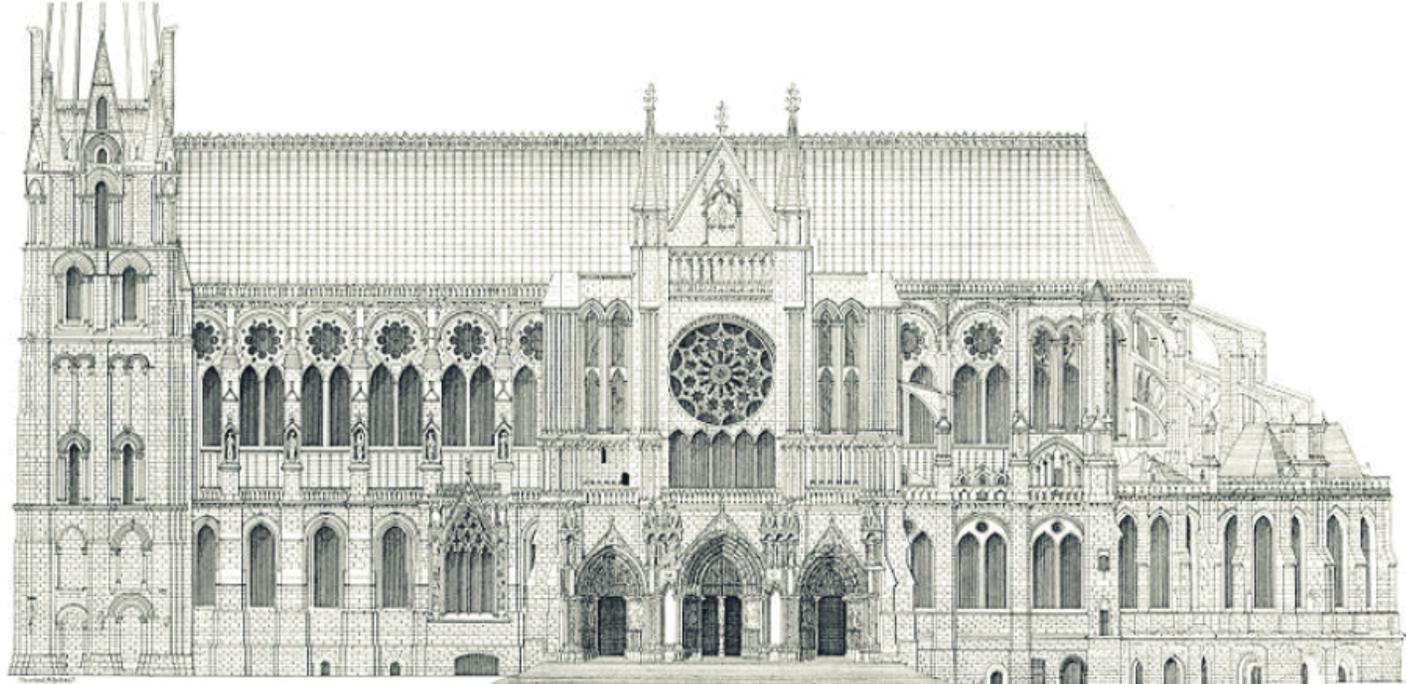
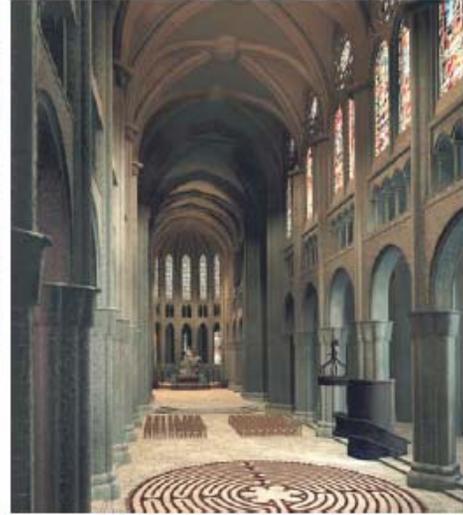
The Cathedral's designer is unknown and the building was constructed by local craftsmen starting in 1193 AD. The Cathedral was constructed to house the Sancta Camisa, the garment believed to have been worn by the Virgin Mary during the birth of Jesus.

Cathedral of Our Lady of Chartres

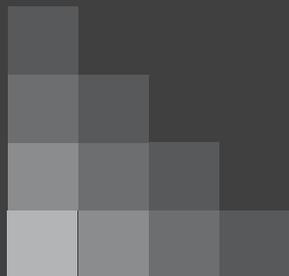
Sources:

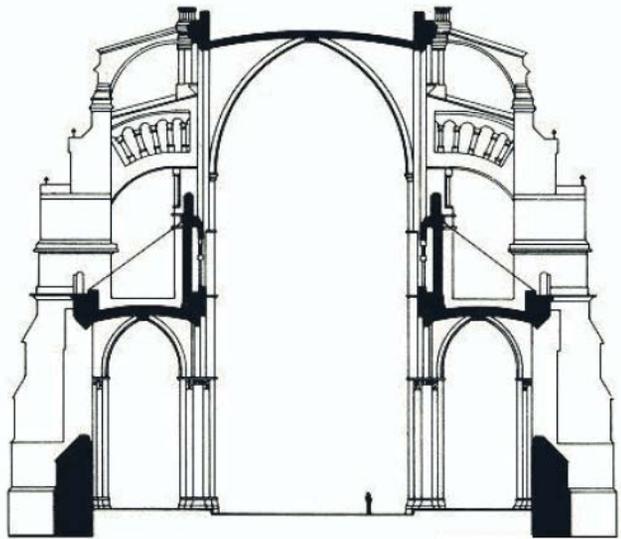
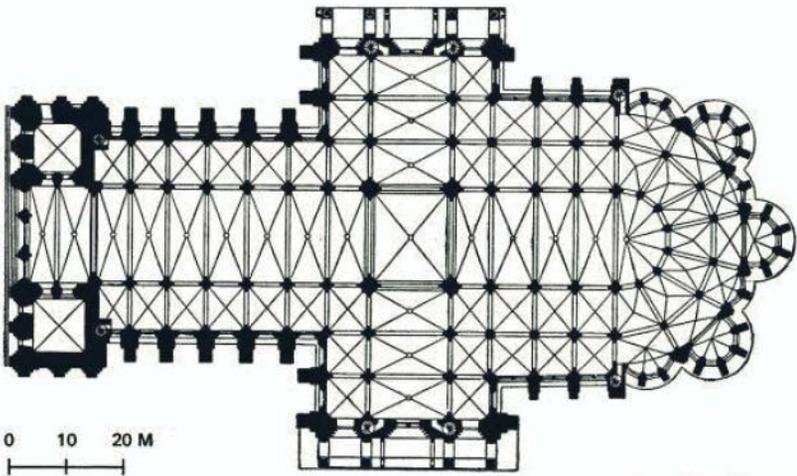
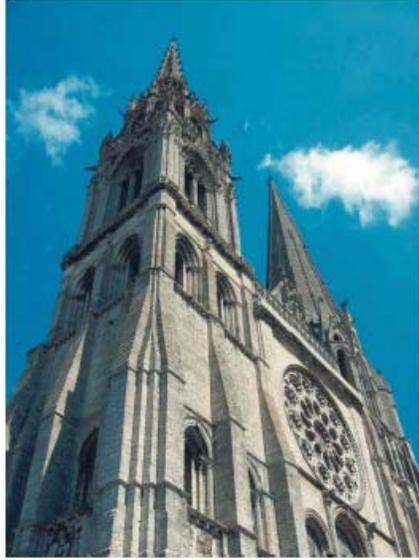
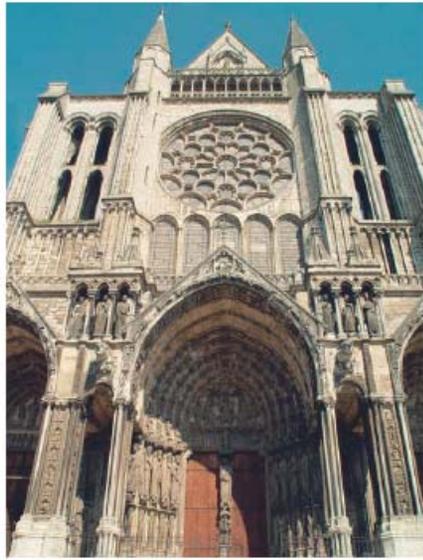
Matthews, Kevin. "Chartres Cathedral." GreatBuildings.com n.d. Saturday September 17, 2011

Scott, Robert. The Gothic Enterprise. Los Angeles, CA. University of California Press. 2003

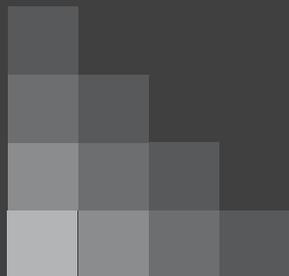


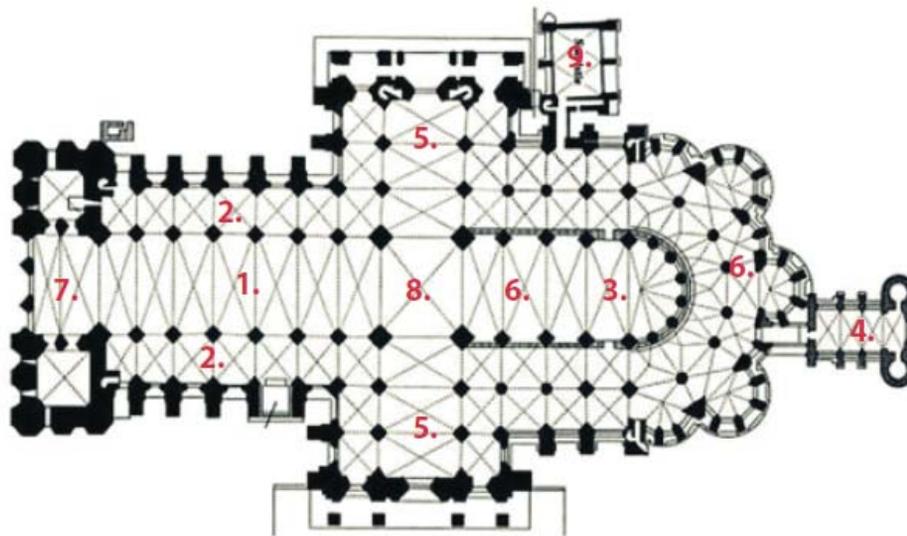
# Precedents- Cathedral of Our Lady of Chartres





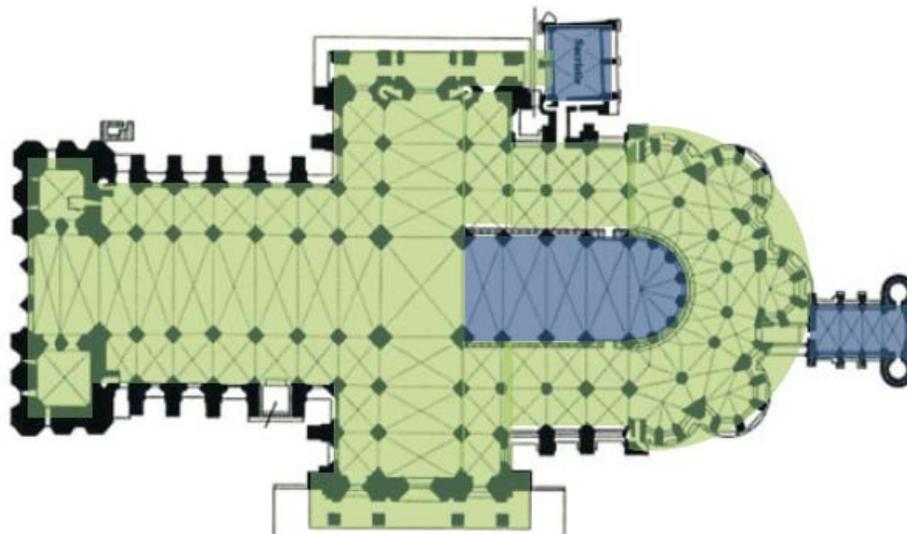
# Precedents- Cathedral of Our Lady of Chartres





Spaces Uses for Worship:

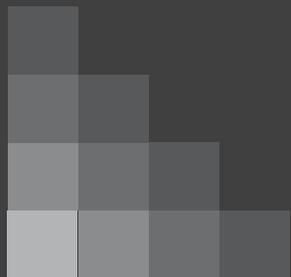
- |           |             |               |
|-----------|-------------|---------------|
| 1. Nave   | 5. Transept | 9. Sacristy   |
| 2. Aisle  | 6. Sacristy | 10. Holy Well |
| 3. Choir  | 7. Narthex  |               |
| 4. Chapel | 8. Labrynth |               |

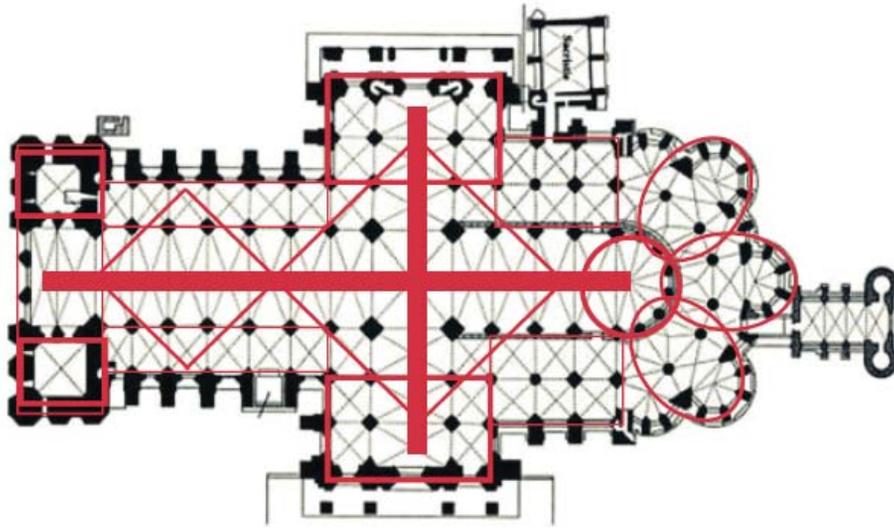


Public vs Private:

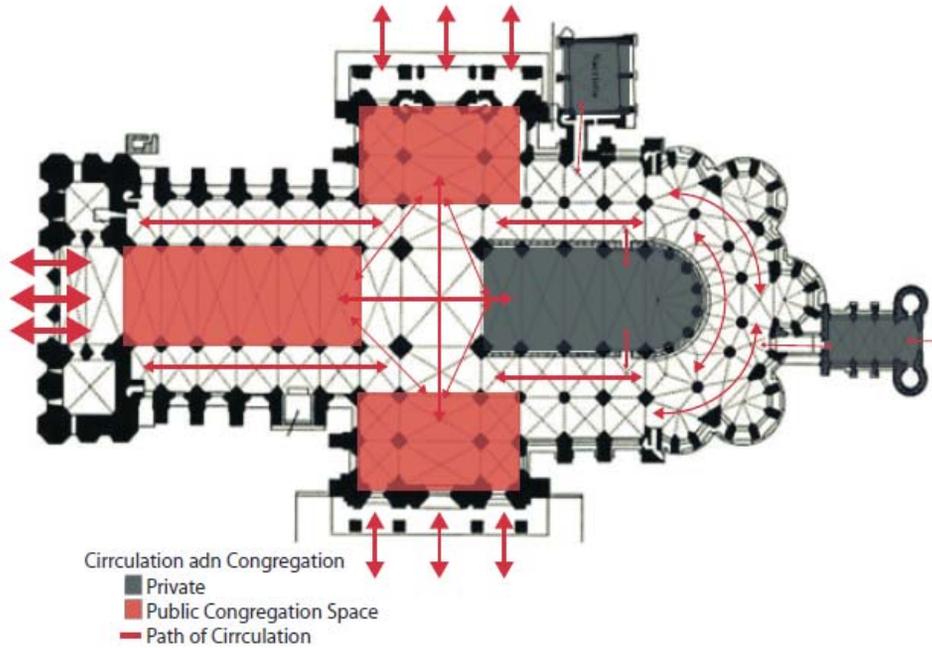
- Private
- Public

# Precedents- Cathedral of Our Lady of Chartres

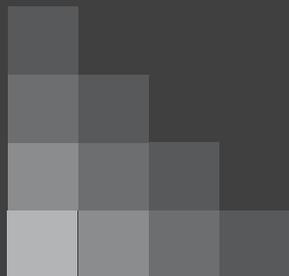


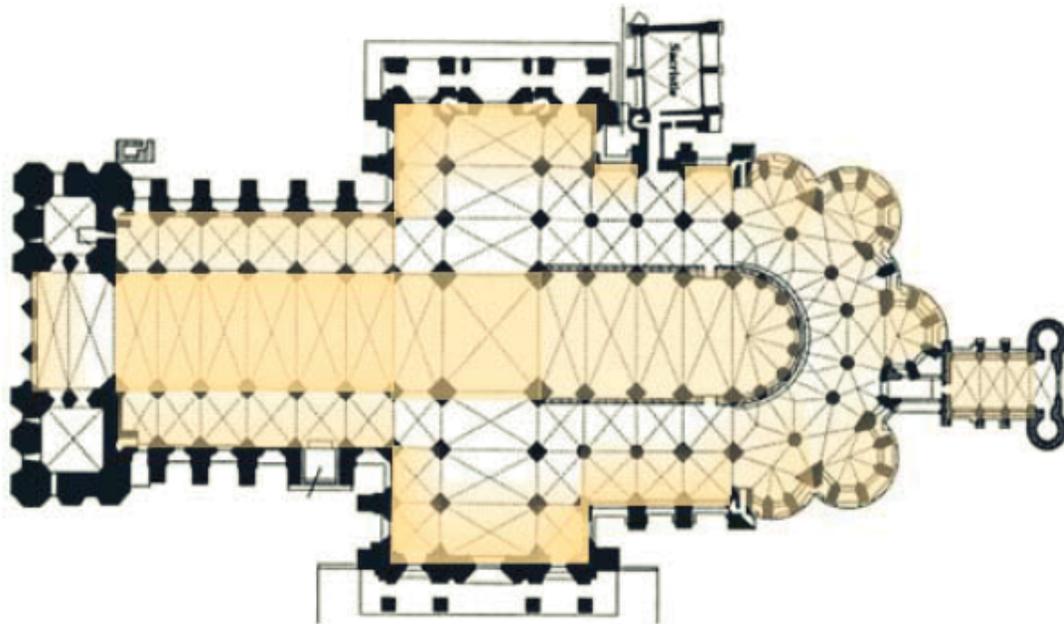
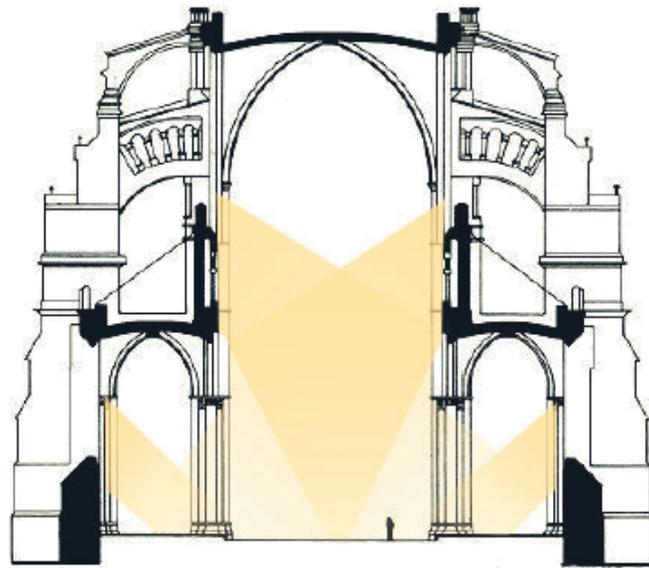


Floor Plan Geometry



# Precedents- Cathedral of Our Lady of Chartres





Daylighting

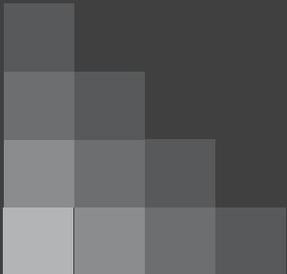
## Precedents- CHA Kenmore

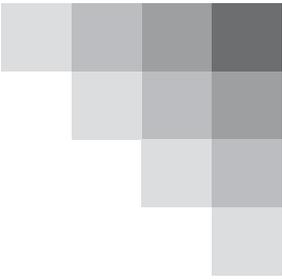
The Chicago Housing Authority, Senior Housing at Kenmore building helps to redefine Subsidized Housing in Chicago. The project was a gut rehab of an existing 8 story building on Chicago's North Side. The project created 100 single occupancy senior residences. Maximizing accessibility and creating homes that are open and comfortable were top priorities.

The project helps to define Senior Housing on a budget. Comfort, ease of access, and energy efficiency were all design considerations.

### Sources:

Kenmore Apartments Senior Housing. Holabird and Root. 2011. web.  
November 10, 2011





# References

“Design for Active Aging.” ASID.org. American Society of Interior Designers.2011 . September 17, 2011

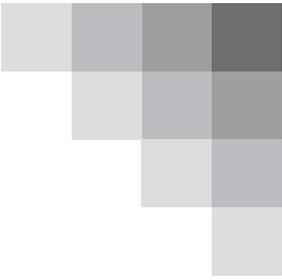
ASID’s “Design for Active Aging” outlines parameters for designing for an aging population and outlines the distinctive clientele within an aging population. The articles including within the “Design for Active Aging” library are tools for universal design within both a commercial and residential environment. Articles include resources on removing barriers within environments, lighting design, and acoustics. This resource directly applies to my proposed clientele, aging women. Proper design is important for all age groups, regardless of income level. In order for a the proposed community to be successful, all residents need to feel valued and comfortable.

“USA.gov for Nonprofits.” USA.gov. 2011. September 20, 2011

USA.gov includes resources for Nonprofit companies. Understanding grant opportunities and tax breaks for Nonprofits will help me to understand the both design and construction financing and maintenance and operations costs. My intention is not to create a nonprofit organization, but to understand the resources available outside of public housing.

US Department of Housing and Urban Development. HUD.gov. 2011. September 19, 2011

The HUD website offers resources for preventing homeless, housing for the aging, low income housing, housing for women and girls, energy use and environmental concerns. The website includes statistics, financing information, and labor information. The most valuable resource available through HUD is their comprehensive housing market analysis and income data bases. Edin, Kathryn.



Making Ends Meet: How Single Mothers Survive Welfare and Low Wage Work. New York City. Russell Sage Foundation. 1997

Making Ends Meet compares the lifestyles of single mothers on welfare and those with low paying jobs. The book looks at costs of living and compares transportation, childcare, housing, and income levels of single mothers. The book includes stories of real working single mothers, outlining their struggles and the obstacles that prevent them from making ends meet. This resource will help me understand a portion of the problems facing low income single mothers and their children. Beginning to understand the problems of the clients will help me to make informed design decisions to help remove obstacles in their lives.

Iceland, John. Poverty in America, a Handbook- Second Edition. Los Angeles. University of California Press. 2006.

Poverty in America outlines the history of poverty in the United States and explains how poverty has been measured over time. It reviews the factors that cause poverty and the public's perception of those living in poverty. The book also discusses the impact of public policy on poverty levels and the public's views. This resource will be useful to understand not only the impacts of poverty, but how poverty is measured in the United States and in other countries