



THE INVISIBLE PERSON

PROJECT TITLE & SIGNATURE PAGE

A design thesis submitted to
the North Dakota State University
School of Design, Architecture, Art

By

Matthew Leake

In partial fulfillment
of the requirements for the
Degree of Master of Architecture

North Dakota State University Libraries Addendum

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October 2020
Fargo, North Dakota



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THESIS

PROPOSAL



7 6 feet back from life Pt. 2

THESIS ABSTRACT

The concept I chose for my thesis project is a unifying idea focused on community healing and more specifically on helping people in extreme poverty or homelessness. It seems that there is a sizable disconnect in understanding why people are homeless, and I believe it is much more effective to look at the source of the problem than to deal with the outcome. The public view is often unapologetic, and many people are quick to blame those facing homelessness for their bad habits or perceived irresponsibility. I believe it is very problematic to view people suffering from this issue through this lens, and often people are judged due to these biases. **Societal prejudice in turn leads to chronic homelessness for many.**

I primarily want to offer these people shelter through my design, but I also want my project to offer services that allow these individuals to heal and grow. I want to provide some sort of public involvement in the project. What can I design to educate people about our homelessness crisis and the individuals affected? Sustainable practices are a priority for me to minimize facility costs in the long run, and I believe green spaces can play a significant role in rehabilitation. Interior spaces will be focused on creating a healthy and safe environment for patrons.

THE NARRATIVE OF THE THEORETICAL ASPECT OF THESIS

Homelessness and extreme poverty have been steadily increasing in the Fargo Metro area and in the modern world. In an ideal world, this problem would be met with swift action. The overall mentality should be, people deserve to have a warm place to sleep, eat, and recover from any ailments they suffer from. In reality, these people are met with outcomes much harsher than this ideal setting.

Societal standards today unfairly label this population as lazy, blaming a lack of responsibility on their current situation. The homeless are often characterized as complacent with their current position. Aid is retracted fearfully because these people are considered abusers. This narrative defining homelessness is often wrong and typically prevents the homeless from successfully navigating their way out of poverty.



8 Big Bright Smile



9 Pain

One of the earlier strategies designers embraced was a movement coined “Hostile Architecture”. This movement was not specifically aimed at the homeless, but rather was defined as an urban-design strategy to prevent crime and maintain civility. These design implementations however were put in place mainly to prevent the homeless from resting in public areas. Some examples are bolt spikes installed on steps, middle bars designed into park benches, and large boulders laid along freeways to prevent camping. This targeted campaign seems unsustainable and problematic. Firstly, it targets a vulnerable population and provides no solution to solve the problem. Secondly it seems wasteful when the homeless population can just find another bench or clearing to rest. Finally, it just seems bad for the general public psyche. Benches, parks, and steps should be designed for comfort and relaxation. There should be no need for hostility in public spaces.

Housing the homeless is another important conversation to have when addressing the rising numbers of poverty. Current housing initiatives, especially in the United States, are focused on short-term living facilities. Homeless shelters are the standard place of refuge for homeless individuals. This system of short-term living facilities is insufficient. It does not prepare or aid individuals with the tools required to get them back up on their feet. It is only designed to temporarily house these individuals and there is little design put into setting these shelters up. Most consist of small, spaced out cots. There needs to be adequate facilities equipped to help these people acquire the growth they need to function in society.

Considering all of these factors, there needs to be a facility that provides a healthy place for the homeless. This environment should promote growth and help them work through any illnesses that they are coping with.

THE PROJECT TYPOLOGY OR PRECEDENT

Typology Mixed-Use Rehabilitation Center

In order to address any mental health issues, there needs to be a registered nurse to prescribe medication and nurse assistants to help care for the patients. There also may need to be a crisis center to handle potential cases of substance overdose and domestic crisis. This will address trauma that can lead to homelessness.

Design with dignity and avoid clinical aesthetic.

In order to address any mental health issues, there needs to be a registered nurse to prescribe medication and nurse assistants to help care for the patients. There also may need to be a crisis center to handle potential cases of substance overdose and domestic crisis.

Address trauma that can lead to homelessness.





Partnerships with nearby universities could help fill the roles of nursing assistants while providing students firsthand experience with working in their chosen medical field.

Offering a space that helps people in the surrounding community learn about the complexity of the homeless population will help with ending the social stigma.



Job training space will also be incorporated. This would operate as a means to provide job opportunities, while supporting the facility itself.

Job training will provide occupants with new opportunities and also establish a link with the surrounding community.

These typologies will all exist on the site but there will be some separation due to the use of the space. For example, housing, which is more private, will be placed in an area separate from the commercial space, which are more social.

CASE STUDY | SHELTER WITH DIGNITY

Designer: Framlab | Location: New York City, NY | Timeline: 2018-Ongoing

Shelter with dignity is a design solution, known as parasitic architecture, where an empty wall face is reimagined as a buildable work surface. This usually leads to a colony-like series of structures that cover the open face of the wall. Framlab's design in particular is a series of modular, hexagonal pods.

Parasitic Architecture was used as a means to provide homeless people in New York City with a place to take shelter as a cost effective solution. The reason for the increasing homeless population in the New York area is because of the reduction in affordable housing opportunities. Before, a housing type known as Single-Room Occupancy(SRO) dominated the New York housing market. A modest sized unit, the SRO accommodated one to two people. This was a housing unit the poorest population relied on heavily. In 1995 changes to the housing code prohibited conversion or new construction of this housing type as a result, an estimated 175,000 SRO units were eliminated, roughly equivalent to New York's entire public housing system.



CASE STUDY | SHELTER WITH DIGNITY

Since 2012, the homeless population saw an increase of 40 percent. This is attributed to three factors.

1. Increasing Gap in Housing Affordability

Between 2005-2013, median rent increased by nearly 12 percent while median income rent of renter households increased by a small 2.3 percent.

2. Cuts in Housing Assistance

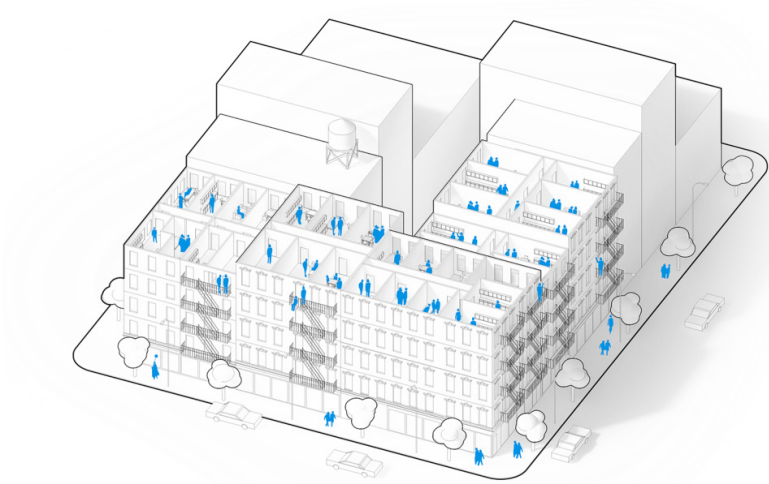
A steady decline of subsidy for low-income households in New York has decreased the access for housing to the poor. In addition to the subsidy decline, investments in building and the preservation of affordable housing as been reduced.

3. Weaker Rent Regulations

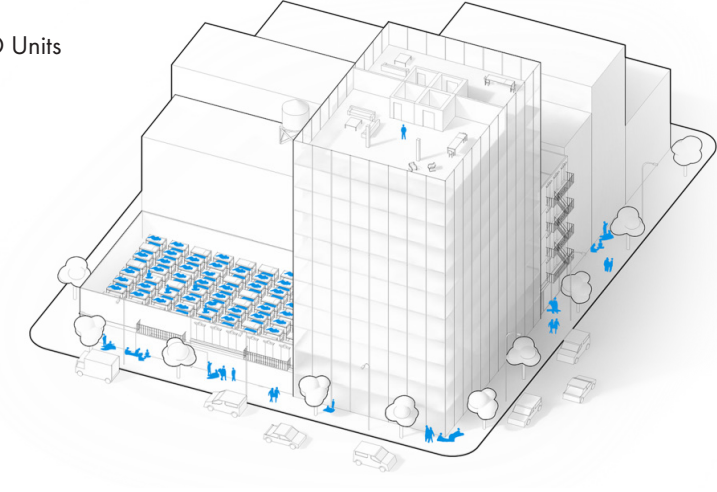
The amount of rent-regulated apartments has steadily gone down. Between 1991 and 2011, the city lost over 100,000 rent regulated apartments. Meanwhile, the total number of rental units had increased by 200,000.

This was most prevalent in the Single Room Occupancy units(SROs), which help supply affordable means of living to the low to middle income population.

SRO Units



The Decline in SRO Units





CASE STUDY | SHELTER WITH DIGNITY

New York's increasing social problem is also a large economic burden as well. The department of homelessness(DHS) needs an annual budget of \$955,300,00 to operate.

Framlab noticed the complexity of this problem and considered two actions to reduce the number of homeless people on the streets on any given night.

- 1. Provide more Low-Income Housing**
- 2. Bolster the Housing Assistance Programs to Reduce the Eviction Rate**

Analysis | Actions

Step one can be directly related to the FM Metro area. There is a lot of housing complexes goin up but an overwhelming majority of them are high-end and unattainable to the poor population. This is especially true in the downtown area where it seems a large chunk of the homeless population congregates. The congregation can be attributed to the access of free facilities the area offers such as the salvation army, family healthcare, the womens clinic, the main bus terminal, and other facilities.

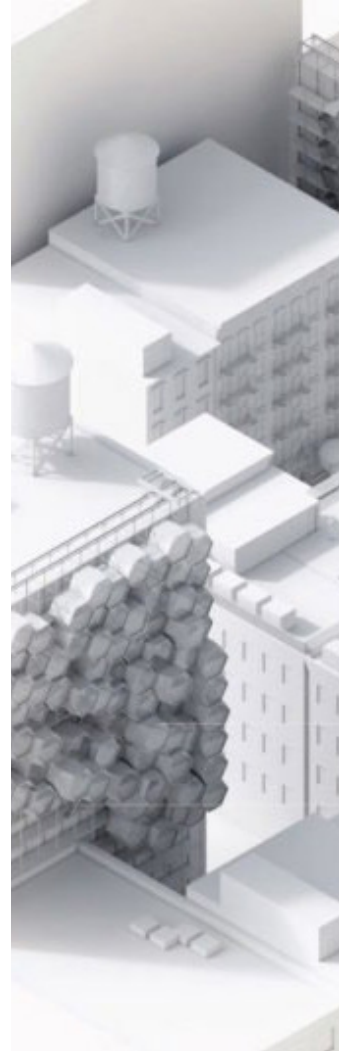
CASE STUDY | SHELTER WITH DIGNITY

Increasing property value is another consequence that relates to the rise of the homeless population in NYC. Many optimal site locations have been filled leaving no viable sites to build a building on. This drove Framlab to think differently about site selection, finding hundreds of acres in the form of vertical lots. These are the sidewalls of the buildings that emerge and disappear as new developments come and go.

This prompted Framlab to create “Shelter with Dignity” to capitalize on this “vertical land”.

With the use of flexible framework - scaffolding - the hexagon shaped “mini neighborhood” can find a spot on any plot of vertical land available in the city.

The pod-scaffolding structure is easily constructed with a crane and the pods provide a variety of functions including opportunities for expansion, shower/bathroom pods, communal pods, and private units. The 3D printed pods are also easy to transport.





Aluminum Fascia

PMMA Smart Glass

Aluminum Frame

Oxidized Aluminum Shell

HSS 1x1x1/4 Frame

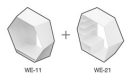
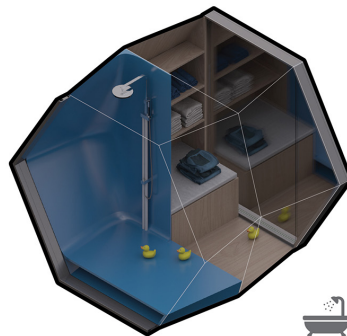
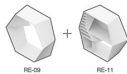
3D-Printed Recycled Polycarbonate

Excited Resident

Aluminum Frame

PMMA Smart Glass

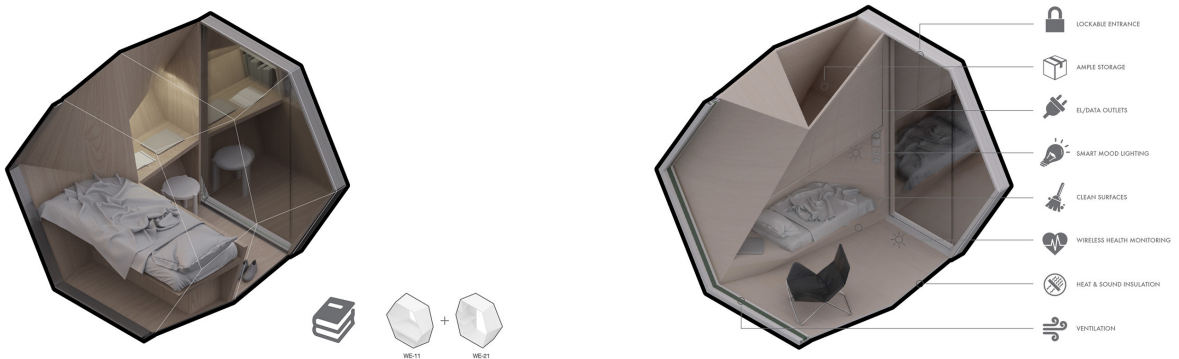
Aluminum Fascia



CASE STUDY | SHELTER WITH DIGNITY

Analysis | Modular 3D Pods

The materials used in the project distinguish it from other modular housing projects. Interiors are 3D printed with interior wood laminate while the exterior is clad with steel and aluminum to withstand the elements. The 3D printed interior modules can be formed into any configuration making the inside of the capsules versatile, meeting both spatial and functional needs. This creates a perfect environment to separate individuals from the busy city streets of NYC.



CASE STUDY | SHELTER WITH DIGNITY

Something that stayed with me while studying this design solution is as a city urbanizes and expands, there needs to be access to housing for everyone on the economic spectrum. The expansion of housing opportunities is tilted too often towards individuals with higher incomes, creating a large vulnerable population.

Shelter with Dignity does a very good job utilizing this simple design. Thoughtful forms breed many opportunities for interior function and the materials used for the project are cost effective. As a result of easy production and transportation of the pods, labor costs must be low as well.







CONCLUSION:

Parasitic architecture is a creative way to use available empty “vertical lots” to create housing pods. Not only is the space utilization of the project interesting, but the use of materials and space are a creative approach. 3D printing the interior space is an efficient means that can be adapted easily, catering to the needs of its inhabitant. Having some experience with 3D printers, the cost of manufacturing must be low to create the pods. The one thing that is problematic with this method in the FM Metro area is the extreme climate we live in. Pods would have to be properly insulated to meet comfortable interior temperature needs. The vertical aspect and the manufacturing of the pods could be extremely useful when creating affordable housing for the homeless population.

RESEARCH FINDINGS:

Shelter with Diginty is an incredibly thoughtful project that navigates the extremely dense NYC housing codes and property taxes. The creation of the hexagonal pods invents a space efficient module and a new space where occupants can find an affordable means to live. Unlike the pod towers in Japan, it provides an easy way to replace and maintain the tiny neighborhood. The project can reap large savings on labor and material costs, making it an ideal concept for affordable housing.



CASE STUDY | CREST HOUSING

Designer: Michael Maltzan | Location: Van Nuys, CA | Completed: 2016

The crest housing project is a development that provides 64 apartments to formerly homeless veterans. Located near public transportation and area resources, the site is an ideal spot for occupants to stay connected to the surrounding community. The building incorporates housing with social services to help occupants receive adequate care. This project serves as a means to end chronic homelessness.

Special consideration was put into creating the site. In order to create a functional and flexible landscape, the design team focused on creating a symbiosis between architecture and landscape. Spaces for parking and fire lanes were designed to be as such, but also to create informal open spaces for residents. Permeable pavers that can withstand various loads create a unique rain collection surface. This allows rainwater filtration into bioswales below the parking lot. Drought resistant trees and plantings are used extensively in the project creating a responsive site.



CASE STUDY | CREST HOUSING

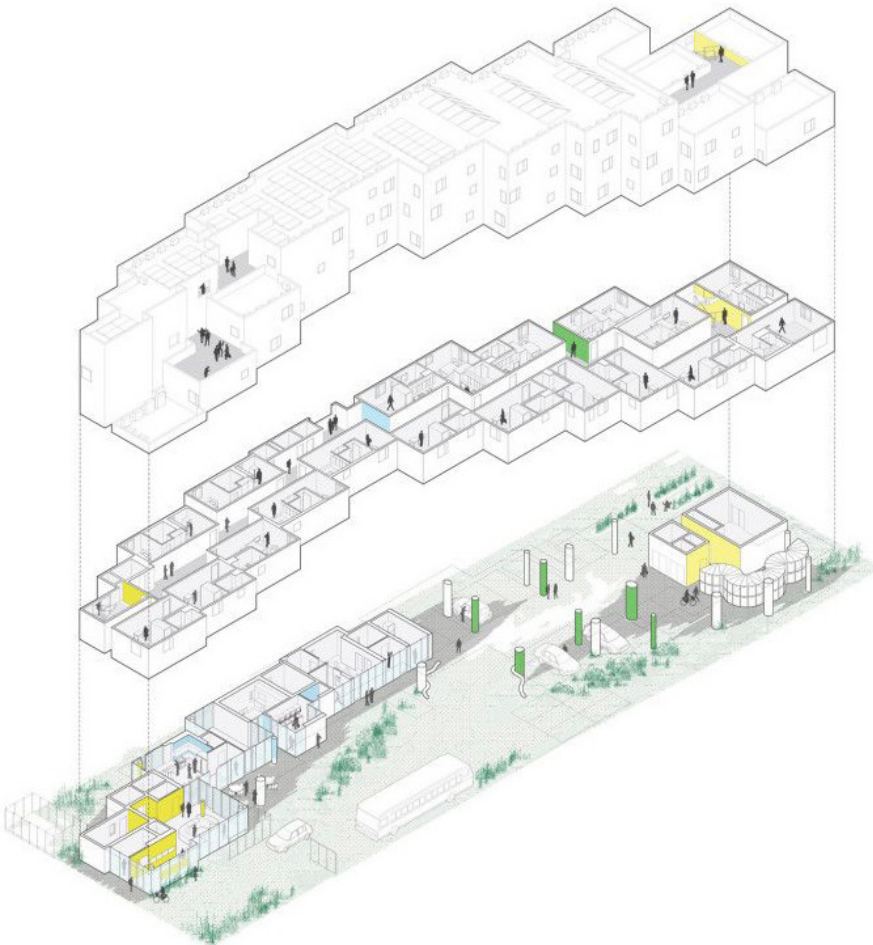
The building has an overall arching form, narrowly stretching across the expanse of the site. This arching creates a sheltered courtyard which is surrounded by open terraces which include open air and an expansive ground level landscape zone.

Many of the spaces allow for an abundance of light. Spaces around the building form a network of community connections that support residents within the building and help them build connections to the surrounding community.

Lobby and reception are located at the front welcoming residents and visitors.

Shared spaces and community resources include residents lounge, community kitchen, laundry room, conference room, social service offices, health clinic, and an outdoor community garden.

The four upper residential floors are comprised of single-studio style apartments and incorporate natural light, cross ventilation, and views to both the circulation corridors and the city in the design.



MECHANICAL EFFICIENCY

- High-efficiency Plumbing Fixtures
- Energy Star Appliances
- High Efficiency Ductless Mechanical System
- PV Panels (Provides 6.5% of Energy Supply)
- Solar Thermal Panels

INDOOR ENVIRONMENTAL QUALITY

- Enhanced Outdoor Air Ventilation
- Local Exhaust
- Unit Compartmentalization
- No VOC Materials and Finishes
- Pre-Tenant Occupancy Flush

MATERIALS + RESOURCES

- 82% Construction Waste Diversion
- Precut Framing Packages
- FSC certified Tropical Wood
- Recycled Materials

SUSTAINABLE SITE

- Very High Density for Midrise (106 Units/Acre)
- Bioswale Stormwater Treatment (2 Bioswales)
- Drought Tolerant Planting
- High-Efficiency Irrigation
- 100% Permeable Paving/Landscape
- High Albedo Material/Reduced Heat Island Effect
- Community Planters
- Long-term Bike Storage for 100% of Residents

LOCATIONS + LINKAGES

- Infill Site
- Near Basic Community Resources
- Exemplary Public Transit Proximity

CASE STUDY | CREST HOUSING

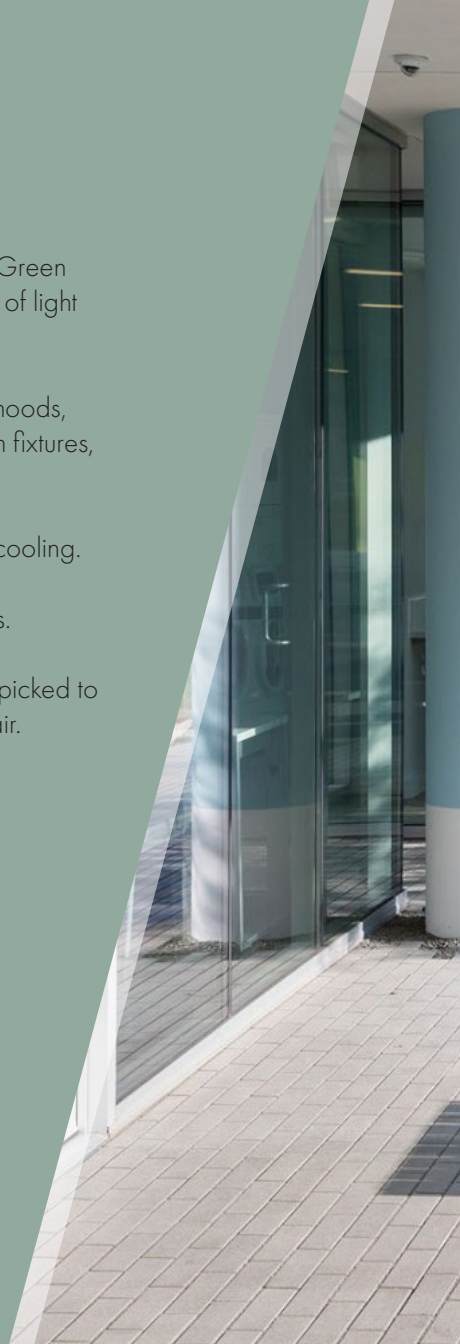
The project received LEED platinum for homes by the United States Green Building Council. The windows in each room provide ample means of light and air.

Units are equipped with energy star-rated refrigerators and range hoods, bio-based marmoleum composition floors, high efficiency bathroom fixtures, and tile made from recycled content.

Cross ventilation creates ductless mechanical units for heating and cooling.

Solar thermal panels provide 50 percent of the heated water needs.

Paint, mortar, grout, and construction adhesives are appropriately picked to make sure there are no volatile organic compounds released in the air.









RESEARCH FINDINGS:

Crest housing is designed to fit the occupants needs. Community spaces at the ground level of the project provide care and connect the surrounding community with the people living in the housing complex. Social services and healthcare facilities give occupants a lifeline with any struggles they may have. The building is designed sustainably, acheiving LEED platinum award for natural heating, cooling, and lighting. Landscaping around the building is welcoming for occupants and also has adequate rain collection systems.

CONCLUSION:

The nature of the interior community the building brings together through the network of spaces is a very important part of this project. Instead comprising the project with just housing, it could be incredibly useful to incorporate in house facilities. The design performance of the project is an amazing feat and should be accomplished in every project. A sustainable project seems to breed healthy living conditions and when occupants have a healthy environment to live in their mental capacity seems to improve as well.

CASE STUDY | THE HIDDEN HOMELESS

Designer: Morris + Company | Location: London, UK | Proposal

“The Hidden Homeless will no longer be hidden, and can be supported with the centre of a vibrant community rich with opportunity.”

The Hidden Homeless is a renovation project aimed at addressing the homeless crisis in London. It is a conceptual proposal for the disused York Road Underground Station which puts the people first when addressing design.

Integration is at the forefront of building design, providing a mixed-use typology with commercial storefronts at ground level proceeding to upper residential levels. In order to involve individuals in the community, it was established that community spaces needed to be introduced to the project to avoid social isolation of this vulnerable population.

The project provides stepping stones towards a permanent home, involving key advisors, such as charities, developers, vulnerable young people, and social workers. Publicly accessible co-working spaces and charity sustain residents, as their shared homes also take on another persona of a commercial destination for people in the community.

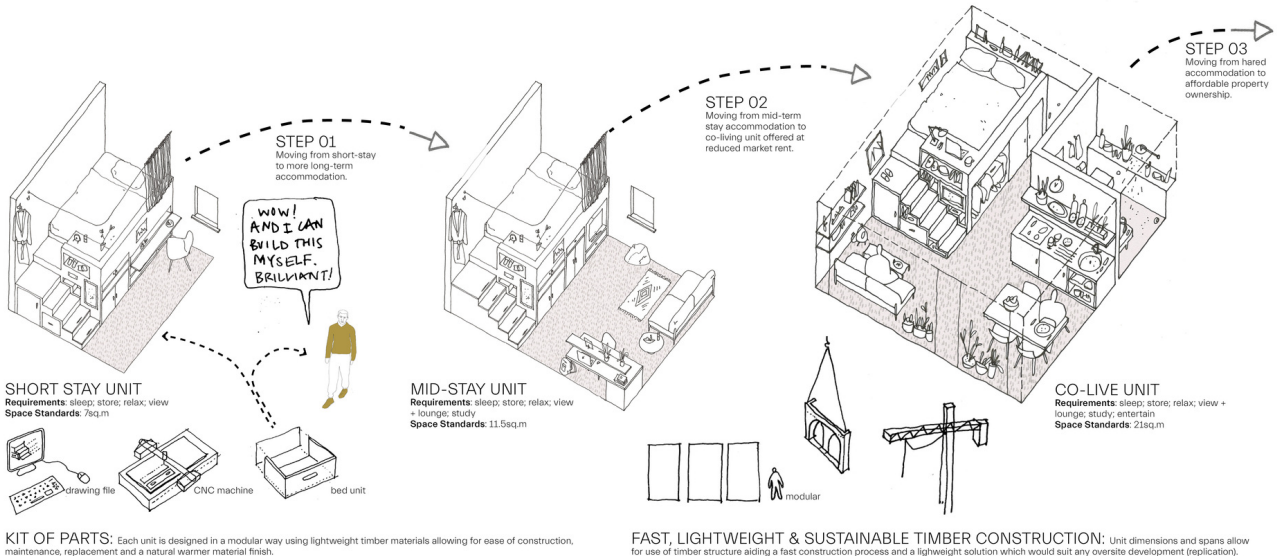


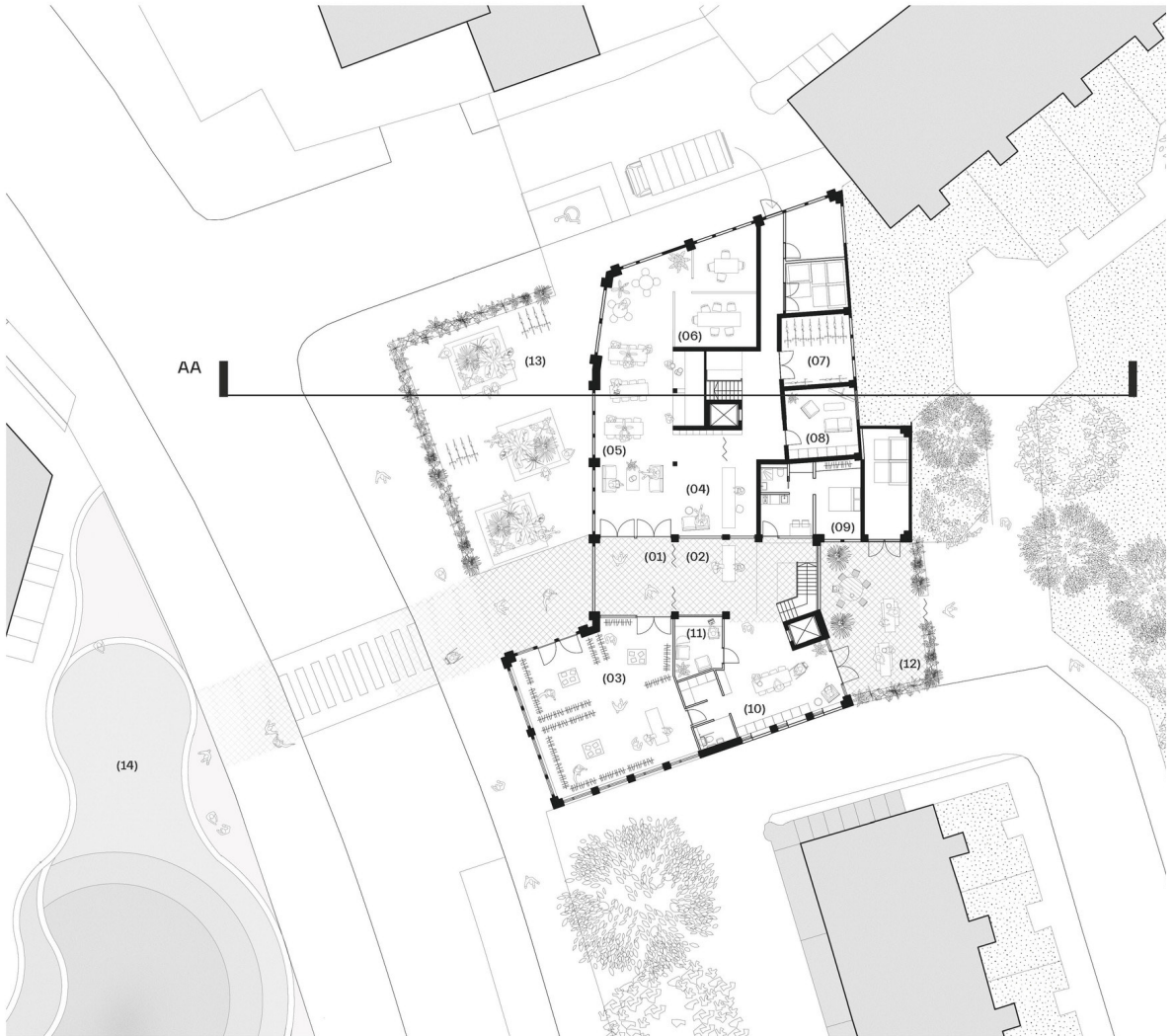


Analysis | Steps Toward Permanent Homes

The steps toward permanent housing is an evolution of living environments over a fixed amount of time. Starting in short term living accommodations, the spaces progress to mid-stay and end at a co-living arrangement. The goal, to give the occupants enough time to establish themselves and ready them for their own home ownership.

Units are customizable ranging from a number of different configurations. To achieve this the spaces are modular and are constructed of light timber.





Ground Floor Plan

01 The Internal Street
 02 Shelter Entrance
 03 Charity Shop

04 Co-living Reception
 05 Co-working
 06 Rentable Meeting

07 Cycle Store
 08 Laundry/TV Room
 09 Operative Suite

10 Laundry & Home Table
 11 Office/1:1 meeting
 12 Secret Garden

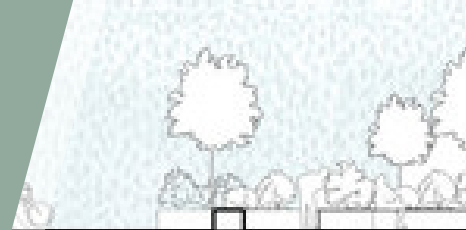
13 Defensible Space/
 Break out
 14 Skate Park

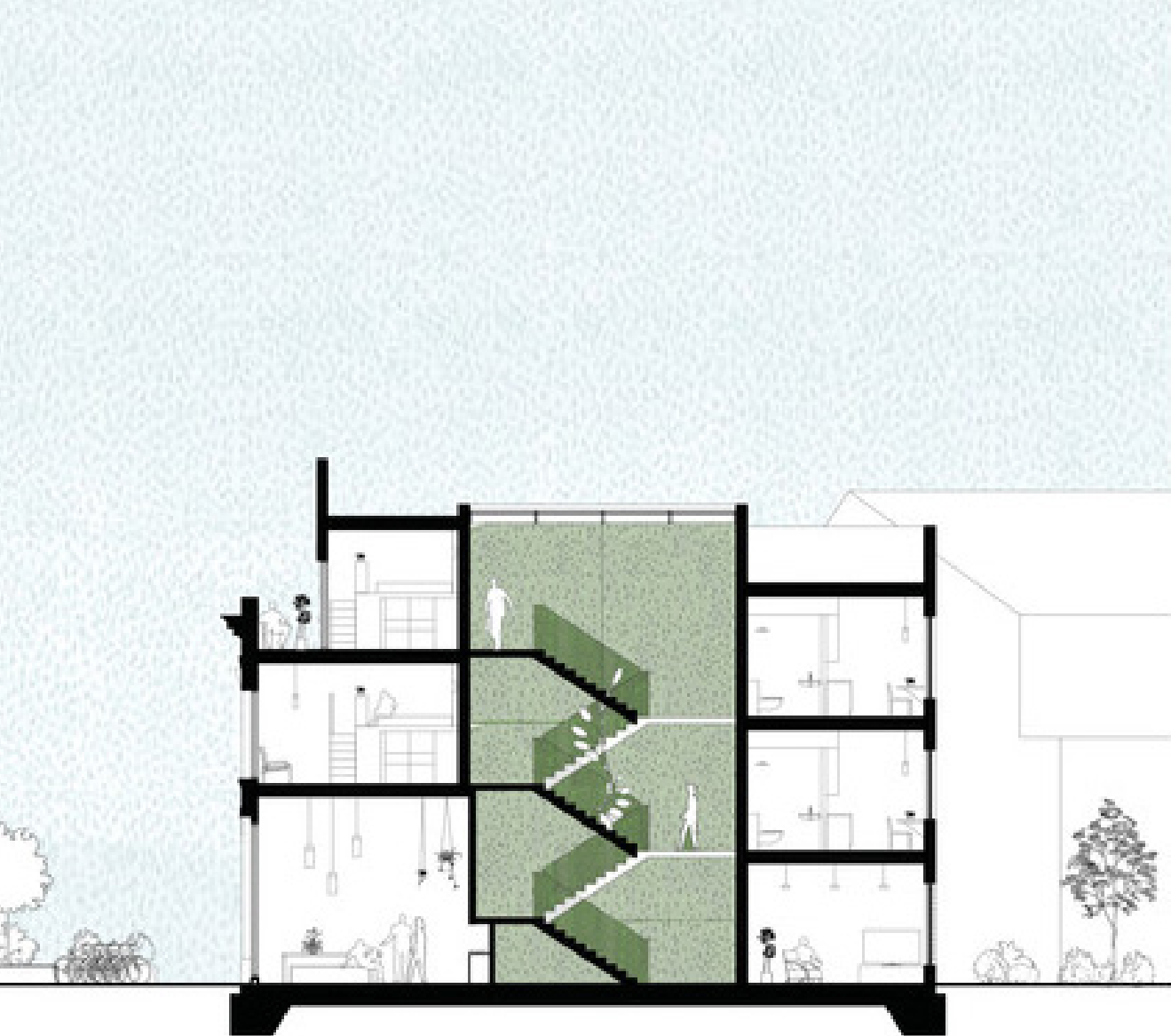
RESEARCH FINDINGS:

The Hidden Homeless incorporates a renovation project with transitional living and social integration. Transitional living is achieved with modular light timber occupancies that aim at helping establish the means for permanent housing in the future. Commercial spaces on the ground level help establish a connection to the community, so the population within is not socially isolated.

CONCLUSION:

This shows different possibilities for how living arrangements can be formed. The transitional property could be something worth pursuing especially if space on the facility needs to be made. This project also utilizes a modular structure which seems to be an easy way to keep spaces transformative.





Section AA

The main circulation staircases become key space organization devices for the scheme. Split level floors help address the large floor to ceiling heights of the existing building and also aid passive overlooking between floors.

PROPOSED SITES

SITE 1 | 64 4th St. N, Fargo, ND 58102

This is the site for the Mixed-Use Rehabilitation Center. The area it encompasses make it a prime spot for the proposal and it is in close proximity to resources used by the occupants. The bus terminal, Public Library, and Family Healthcare are just some. Being apart of the Fargo Downtown area includes the client population into the surrounding community.





SITE 2 | 207 4th St. N #4817, Fargo, ND 58102

The Site pictured above will be is currently a low volume parking lot adjacent to the Fargo Public Library. The small distance between this site and the Site 1 allow occupants to be close to resources available to them. Like the previous site, it is also within walking distance of the resources allocated for the low income population in Fargo.



2

4

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12

11

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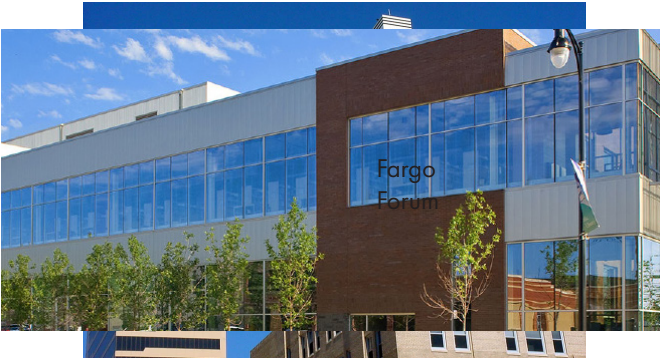


ANALYSIS | SURROUNDING CONTEXT

- 1 Sanford Broadway Medical Building
- 2 The Salvation Army
- 3 Fargo City Hall
- 4 US Post Office
- 5 Fargo Public Library
- 6 Quentin N. Burdick US Courthouse
- 7 Red River Women's Clinic
- 8 Fargo Fire Department
- 9 Family Healthcare
- 10 Fargo Main Bus Transit Hub
- 11 Island Park
- 12 Cass County Courthouse
- 13 Prairie St. John's

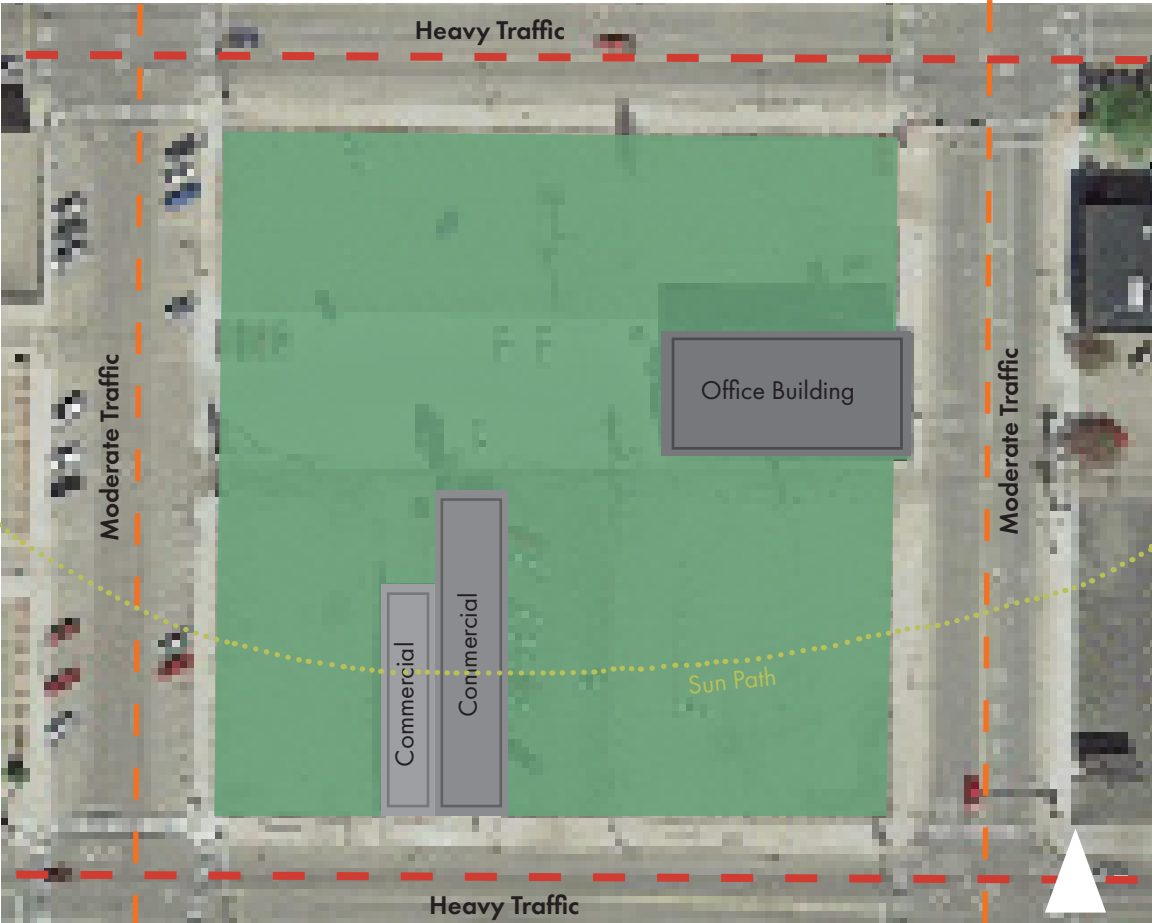
CONTEXT | MICRO

Fargo Public Library









MAJOR PROJECT ELEMENTS

1

Long-term living for homeless

Finland's structure of permanent social housing has reduced its homeless population by 35%. I want to explore this idea to see what elements, beside permanence, have worked to slow the population numbers. This will be compared to our current system of short-term living facilities, such as homeless shelters.

2

Healing/growing environment

In order to help people suffering from homelessness, there needs to be an environment that promotes growth and healing. Many of these individuals suffer from a chronic illness, mental health disorder, or substance addiction. There needs to be facilities put in place to help these people cope with these debilitating ailments.

3

Safety and Health

One of the most important factors is the safety and health of everyone in the facility. Indoor spaces will be design with safe materials and organized to make navigation effortless.

Sustainability/Green Design

Long-term cost effectiveness and green power will be a major focus in the design of the buildings. This will include integration of green technologies and energy massing when dealing with building placement and orientation. Green spaces will also be investigated for effectiveness with mental health recovery.

4

Learning Community

There is a possibility to aid the homeless population while providing a learning environment for nearby universities. This could provide future professionals with real life experience when helping people with their ailments. Community learning spaces can also be incorporated to provide the public with a chance to help homeless populations.

5

USER/CLIENT DESCRIPTION

Homeless Population

The homeless population will be the main group of people considered while designing this project. The facility and housing will be designed to help this population recover and return to normalcy.

Assisting healthcare workers

Design will incorporate services for assisting healthcare workers. To provide aid for mental health disorders, there needs to be a registered nurse to prescribe medication and nurse aids to help care for occupants. Interior design will focus on creating a healthy environment for these workers.

General Population

The general public will be introduced with some community spaces and commercial spaces. The plan with these spaces is to create a healthy societal experience for people staying at the facility. I do not want the facility to be completely dissociated from s, so these public places will hopefully be a good integration into my design.

THE PROJECT EMPHASIS

The emphasis of the project is to help the homeless population heal and grow. This will be achieved through proper design of facilities that focus on therapeutic settings and that offer a place for the homeless to permanently reside. Information provided by the Coalition to end homelessness in Fargo shows that currently the homeless population is at 1,075 people. These numbers are from 2017, so that number could potentially be lower or higher. About half of this population has a chronic disease or mental illness that is preventing them from making it out of poverty. A quarter of this population is suffering from a substance dependency.

In order to address this, the overall design will have to focus on a safe and healthy environment for everyone residing or working in the facility. What will make the project comfortable and safe for occupants that are suffering from something that impedes their day to day activities? What can be created to help them with these impediments? How can a safe and comfortable environment be created for facility workers helping in the recuperation process? There are a range of ages and gender identities within the homeless population which will need to be carefully incorporated into design. First there is an increasing number of students in the FM Metro area that reported they do not have a permanent place of residence. Design also needs to address young children or adults who are experiencing homelessness.

Lastly design should try to incorporate some kind of public function. The goal for these spaces will be to educate the public. There is a sense of condemnation in the public's eyes currently that needs to be set straight in order to help this healing process. If people do not automatically criticize a homeless person, maybe this could help these people grow and better themselves.

GOALS OF THE THESIS PROJECT

1. Provide shelter for the homeless population

Most importantly, the end result of this project is to provide housing for the homeless.

2. Make plans for permanent housing

Of this housing, a large portion will be offered as a permanent means of getting off of the streets.

3. Create a safe and healthy environment

Housing and supplementary spaces will focus on eliminating the feeling of being in an institutional setting.

4. Growth is a priority for recovery

The design of the built environment should highlight progression. This can be achieved with transitional and flexible spaces.

5. Find opportunities to educate others

How the clients are accepted and integrated into the surrounding community is another thing that can have an effect on their recovery. Having community spaces that bring them closer to the surrounding community will help address this problem.

6. Incorporate Sustainable/Green design

The building should be designed for longevity. Overall facility costs can be lowered if the building is self-sustaining.

7. Work towards LEED Certification

LEED guidelines will help establish sustainable principles when designing.

8. Look at WELL standards for designing interior spaces

WELL standards provide guidelines for designing healthy spaces for occupants.

9. Design Comfortable Spaces for Other Users

The environment that will be created should be comfortable for others using it, such as workers, students, or visitors.

10. Commercial space that will provide funds for facility

In order to supply some of the centers annual fees it will have commercial space where partial funds will go towards said fees. This will also double as job training opportunities for occupants.

11. Facilities for possible partnership with university healthcare programs

A space dedicated for education will establish both connection to the academic community and opportunities for students to learn about the complexity of the individuals residing in the center.

12. Community spaces for learning

Dedicated area for community gatherings can provide unique opportunities for the occupants. Job fairs, community fairs, and art shows are just some of the possibilities for these spaces.

PROCEEDING

Upon completion of the proposal phase of the thesis project, I will take a closer look at the history and progression of the public attitude towards the homeless. This may include reading historical data and interviews to get a clearer picture of historical/current context. For programmatic research it may be valuable to interview workers in similar facilities to assess needs for occupants.

Form and sustainable measures will be measured with programs used to aid these processes, such as 3D modeling programs. Site analysis will aid orientation of the building on the site and what configuration would be best for solar gains. Modular design could be an interesting solution to pursue to make the cost of living arrangements more feasible.

The design plan proceeding will be to focus on the occupant first. Design will be molded around what will create a healthy environment to heal. Studies on green design will be pursued to recognize the effectiveness it has on life indoors. This will all be shaped to fit the key factors of: Community, Safety, Health, and Growth

Fall Semester Thesis Research

Holiday

December

Demograph Data

November

Codes & Regulations

October

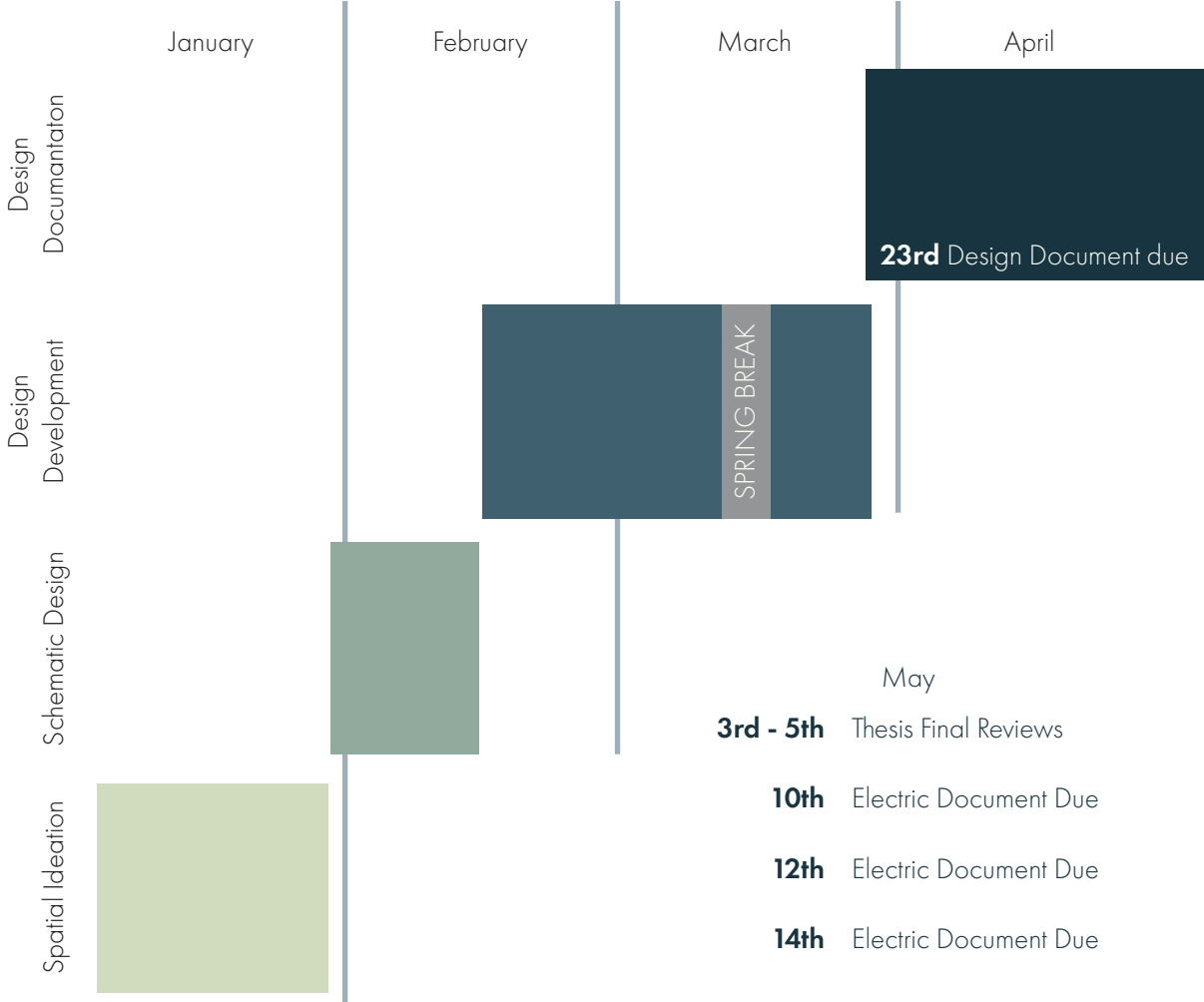
Historical & Site Analysis

September

Intro to Research Methods

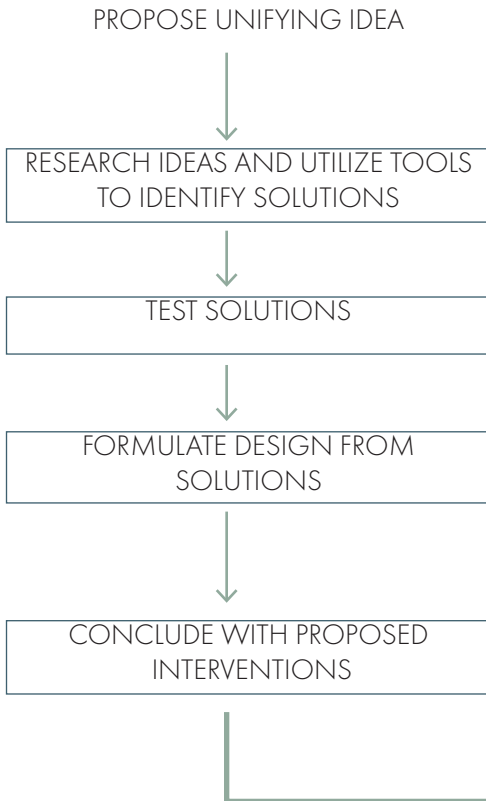
August

THESIS SCHEDULE SPRING SEMESTER



DESIGN METHODOLOGY

In order to achieve a scientific research conclusion the following process will be established:



DOCUMENTATION OF PROCESS

Physical Documentation:

Hand sketching
Hand Modeling

Modeling Software:

Autodesk Revit 2021
Rhinoceros 6

Representative Software:

Adobe Photoshop
Adobe Illustrator
Adobe Indesign

Documentation of Publications:

Material used in final submission will be referenced in APA Format:

Publications from NDSU Library Archives



Matthew Leake

Hometown Grand Forks, ND

Phone [REDACTED]

Email [REDACTED]

PREVIOUS STUDIO EXPERIENCE

2ND YEAR 2017-2018

- Fall 2017** Darryl Booker **Teahouse** Moorhead MN
Conceptualizing site and ceremonial art of the Japanese tea house
- Spring 2018** Milt Yergens **Dwelling** Marfa, TX
Communal design focused on environmental change.
-

3RD YEAR 2018-2019

- Fall 2018** Raegen Schwaen **Oscar Zero** Cooperstown ND
Preservation of existing launch center with visitor center proposal
- Spring 2019** Ron Ramsey **Consulate** Chicago, IL
Design solution for secure building with minimal square footage
-

4TH YEAR 2019-2020

- Fall 2019** David Crutchfield **Highrise Capstone** Miami, FL
Design solution for Highrise building in tropical climate zone
- Spring 2020** Amar Hussein **Marvin Windows** Fargo, ND
Dwelling design competition

THESIS

RESEARCH

RESEARCH RESULTS HOMELESS POPULATION IN FM METRO AREA

Estimation of the homeless population in the Fargo-Moorhead Area is gathered through documentation of people currently staying in emergency shelters and transitional housing programs, as well as others staying in forms of shelter that are not permanent or regular, such as outdoors, in a vacant building or car, a place of business or those currently doubled up with friends and family as temporary means because they have nowhere else to live.

At any given night there are **246 people** in Cass County, ND, and **147 people** in Clay County, MN, experiencing homelessness in a sheltered location (Either in emergency shelters or in a transitional housing program).

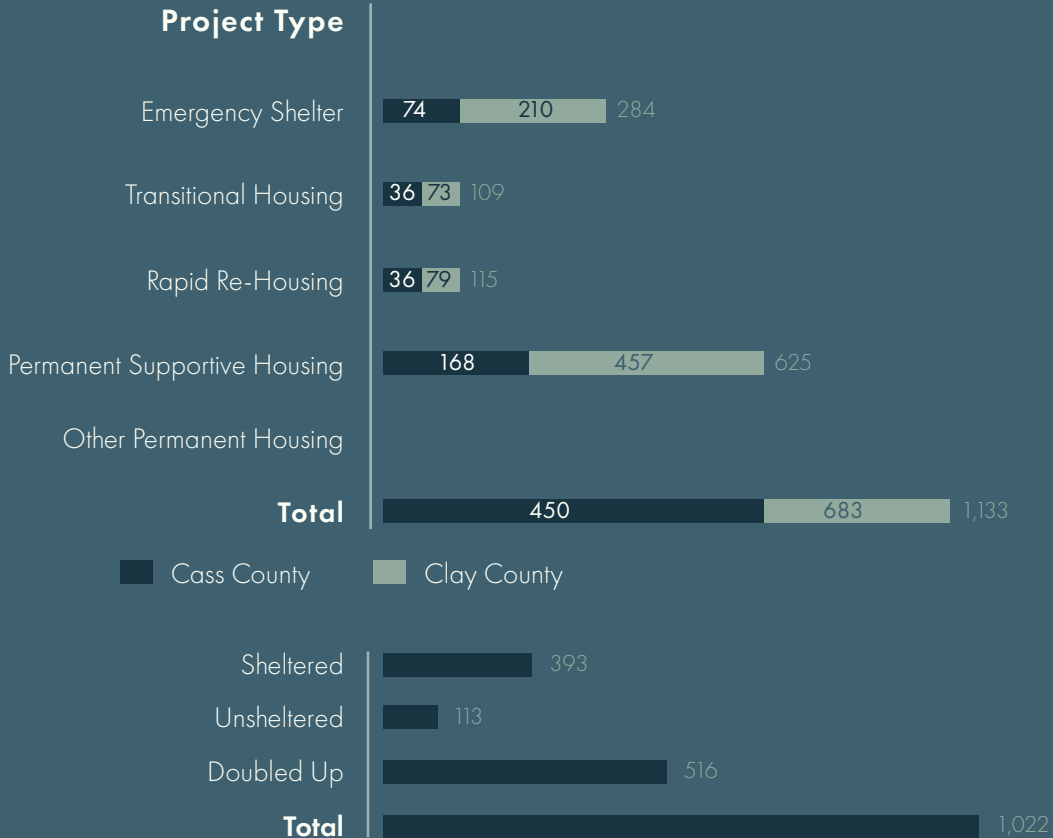
It is estimated through the Emergency Shelter Bed Prioritization list - managed by all emergency shelters in the Coalition, that there are a total of **113 people** staying in a place that is not considered a permanent place of residence and make continual efforts to access shelter beds. Of this number 98 are adults, 6 school aged children (ages 5 to 18), and 9 children under the age of 5.

Gathering data on those who are doubled up is a difficult task because they often go unseen. In the FM metro area, **555 students have been identified as homeless**. A portion of these school aged children, 33 to be exact, were staying at the two emergency shelters serving families; 6 of the 33 were seeking shelter with their parents. It is assumed that the remaining 516 of the students identifying as homeless were doubled up, though it is believed by the coalition that there is a significant under representation of the number of students doubled up in our community.

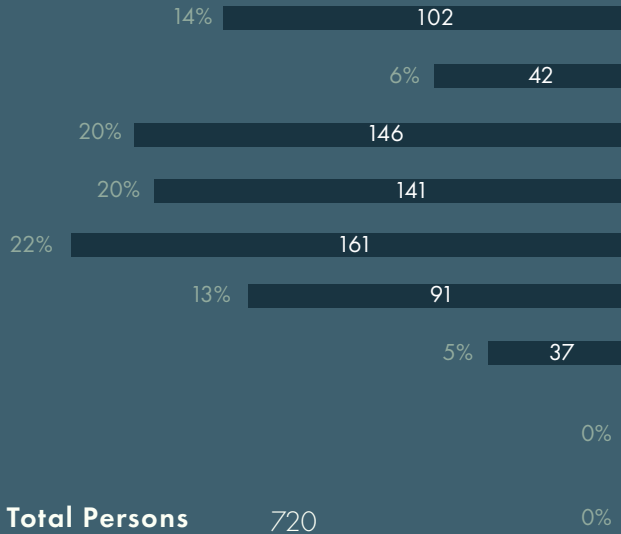
Compiling these numbers, on any given night there is roughly **1,022 people** experiencing homelessness in the FM Metro Area.

*Data gathered at the beginning of April 2020

Population per Housing Type



Age Breakdown



AGE

Age 0-17

Age 18-24

Age 25-34

Age 35-44

Age 45-54

Age 55-61

Age 62 and Above

Client Doesn't Know/
Client Refused

Data Not Collected

65.8%(474) Identify as male while 33.5%(241) Identify as female

3 individuals identify as trans female (male to female) and 1 individual identifies as gender non-conforming

93%(547) live in household types designated as Singles: Adults without children

7%(44) live in a household type designated as Families: Adults with Children

RESEARCH RESULTS CHRONIC HOMELESSNESS

Of the homeless population there is a considerable amount of individuals that are considered “chronically homeless, meaning they require more supportive services and long-term supports in order to find success.

CLASSIFICATIONS OF CHRONIC HOMELESSNESS

- Currently experiencing homelessness
- Been homeless for at least one year during the current episode OR homeless for less than one year in the current episode, but homeless at least four times in the previous three years
- Disabled (those who have a physical, mental, or health condition that limits the kind of work they can do OR those who have physical, mental, or other health conditions that makes it hard for them to bathe, eat, get dressed, get in and out of a bed or chair, or get around by themselves)

A majority of the population of chronically homeless in FM Metro Area are working age adults. Compared to the data collected in 2019, the population of chronic homeless has become slightly younger, seeing a 3% increase in those under the age of 18 and a 3% decrease in those over the age of 55. This is attributed to advances in data collection regarding this subset of the overall homeless population.

Response The chronically homeless are the portion of the population that will need the most help. These occupants do not have the means to get out of homelessness and will need supportive services as well. In order to achieve proper design, units will have to meet requirements for these occupants. Units will also be permanent so that these individuals will have resources on site they can access.

RESEARCH RESULTS YOUTH HOMELESSNESS

Homelessness in the youth population is often harder to track. Data collected by the HMIS shows that in 2019 there was a total of **324 youth** receiving homeless services in Cass-Clay County. This population is recognized as young adults **24 years old or younger**, living without parents or guardians and may potentially be parenting themselves.

Gender Identity is more diverse in the youth population with 48%(157) female, 46%(150) male, 2%(6) trans female (male to female), 2%(5) trans male (Female to male), and 2%(6) gender non-conforming.

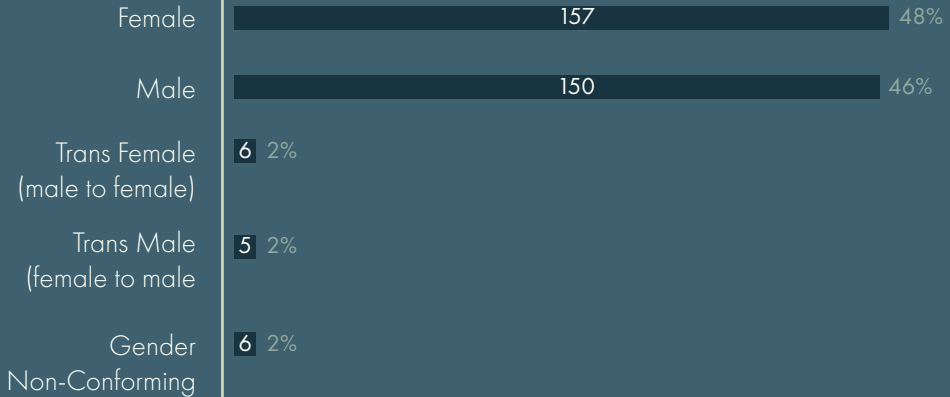
Of the 324 youth, 31 of these youth have assumed parent roles themselves and are between the ages of 18 and 24. **They care for a combined total of 49 children.**

Assessing the population of youth under the age of 24 years old, 56% of youth answered that their lack of housing was caused by an unhealthy relationship, either at home or elsewhere (emotional, physical, psychological, or sexual).

Response This population is very diverse in that some of the youth have families that are currently doubled up, some are being taken care of by an older sibling, and some are on their own. Design will have to address all of these possibilities and this will have to be a different section of the building separate from other portions of the homeless population. Units will be individual or family, but will have shared spaces with the other units to help monitor the youth and create a sense of community.

Youth Population Statistical Analysis

GENDER IDENTITY



of Youth Assuming Parent Roles

31

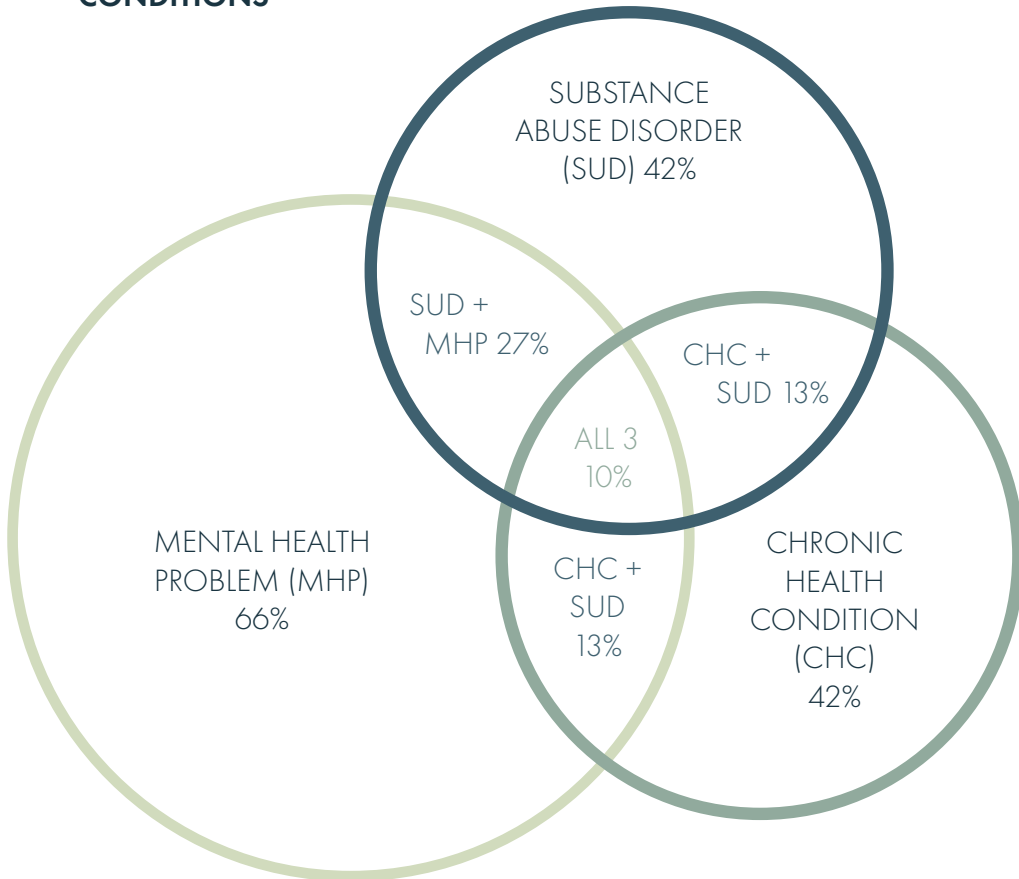
Combined Youth Under Their Care

49

56%

Lack housing because of an unhealthy relationship

CO-OCCURRING CONDITIONS



RESEARCH RESULTS HEALTH CONDITIONS & CO-OCCURRING CONDITIONS

There are many complications that act as barriers, keeping the homeless population confined, the most significant being physical health, mental health, and substance abuse. HMIS data served in 2019 shows that **44% of the individuals** have a disability of long duration. Disabilities included are ongoing, continued, or for an indefinite duration.

OF THE INDIVIDUALS WITH DISABILITIES

- 42% are diagnosed with a chronic health condition, physical disability, or developmental disability.
- 66% (two thirds) are diagnosed with a mental health complication
- 42% have a substance abuse disorder (to either drugs, alcohol, or both)

Often homeless individuals experience co-occurring conditions, meaning of those who reported having been diagnosed with a chronic health condition, serious mental health problem, and/or a substance abuse disorder, 41% of respondents have been diagnosed with more than one of these conditions and 10% report all three.

Response The best thing to relieve the strain on this portion of the homeless population is to offer them permanent housing. This will give them a place off of the street while they can invest their time into programs that will help them with the stresses of these conditions. Permanent housing will have to accommodate these conditions in a way that helps the client, but also provides the client with a dignified place to live. This would be best coupled with assisted services that provide psychiatric care and access to a nursing facility.

RESEARCH RESULTS | PRIOR LIVING ARRANGEMENTS

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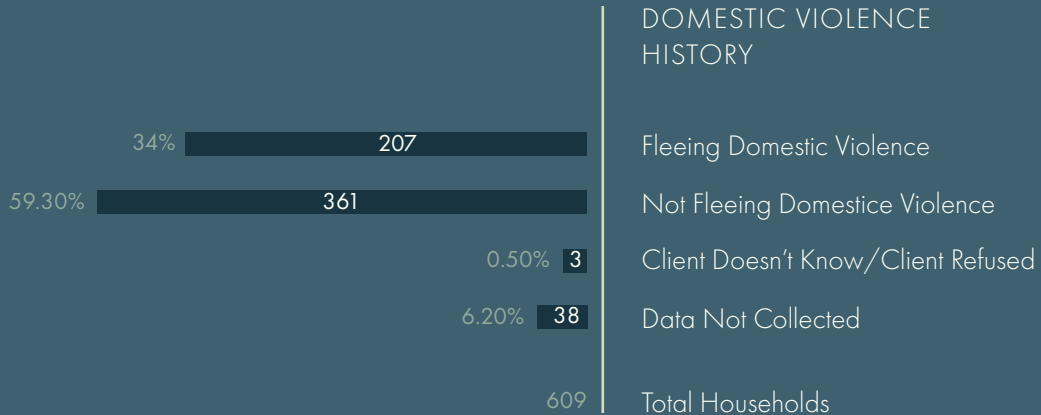
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Response | This section helps provide a better picture for prior accommodations. Some of the homeless either came from a house or are currently doubled up, meaning some of these clients could possibly be ready to live independently. In order to help this population, a separate building will be built away from the main center for people seeking permanent accommodations without services. The others will be in the main center where assisted services will be provided. Both will have to address the stigma of low-income housing while providing a connection with the community through design.

Prior Living Arrangements

PRIOR LIVING ARRANGEMENTS	YOUTH		FAMILIES		ALL CLIENTS	
	Count	Percentage	Count	Percentage	Count	Percentage
Homeless	96	30%	162	39%	1,196	46%
Institutional Setting	22	7%	7	2%	288	11%
Permanent Housing/ Own/Rental	37	11%	130	31%	365	14%
Doubled Up (Staying with Friends or Family)	121	37%	93	22%	532	21%
Hotel or Motel without Voucher	9	3%	18	4%	77	3%
Client Doesn't Know/ Refused	8	2%	1	0%	19	1%
Data Not Collected	31	10%	3	1%	114	4%
Total	324		96		2,591	

Domestic Abuse in Homeless Population



HMIS Data shows that of the 3,322 individuals, 2,591 individuals entered programming or began receiving services in 2019. One fourth of these entries had a history of domestic violence.

The data regarding domestic violence does not capture the full impact however. Violence may be the primary cause of an individual's homelessness but may not be reported. Further, research regarding the chronically homeless individuals shows one of their first times experiencing homelessness was due to an act of violence.

RESPONSE This is another vulnerable portion of the homeless population that will need a separate area of the center for themselves. Victims of abuse have a hard time trusting other occupants, commonly ones of the opposite sex, meaning they will need a space where they can regain that trust and be completely safe from any form of violence. To achieve complete separation this area will need different access and its own facilities. Units must be flexible, some of these occupants could have children. Units provide privacy, but will can be transitioned to accommodate roommates if the occupant chooses so.

RESEARCH RESULTS PRIOR EXPERIENCES

Agency specific data provided shows 80% of individuals who stay with the YWCA of Cass Clay County are seeking services because of violence. This can be linked to national research which has shown being a victim of violence as the number one reason woman become homeless.

Another assessment for housing services using the VI-SPDAT* revealed that a staggering 58% of participants responded that their current homelessness could be attributed to their experience of emotional, physical, psychological, sexual, or other type of abuse, or by any other trauma they have experienced. An additional 34% of people assessed and who are experiencing homelessness identified they had been attacked or beaten since becoming homeless.

The Everyone Counts Survey conducted in October 2018 accounted for 243 respondents who were asked about childhood experiences and traumatic experiences. Among the adverse childhood experiences inquired about in the survey, those experienced the most were:

- Living with a substance user (54%)
- Witnessing abuse of other family member (44%)
- Being Physically abused as a child (36%)
- Living with a parent or guardian who struggled with mental health issues (32%)

As children, approximately one-fourth of respondents lived in a foster home and 18% in a group home. About 30% were held for more than a week in a juvenile detention center or other juvenile facility or camp.

RESEARCH RESULTS BARRIERS TO SUSTAINABILITY

Income

As of April 2020, 48% of adults entering services in the past year had some form of income and 34% were enrolled in non-cash benefits, such as the Supplemental Nutrition Assistance Program (formerly known as Food Stamps).

Federal poverty guidelines establish that a single adult experiencing homelessness makes \$12,490 or less annually or about \$1,040 monthly. A family unit makes roughly \$25,750 or less annually or about \$2,145 monthly.

A steady income is one of the largest obstacles especially when it pertains to acquiring shelter, whether it be renting or ownership. Many variables can

RESPONSE To provide the occupants with a shelter, all units will be a permanent housing or transitional-permanent. A portion of the site will be dedicated for commercial use which will double as job training opportunities for individuals who are seeking work. This will provide incentives to seek out a steady income and further progression towards independent living.

Housing Burden per Income Level

Percentage of Households who are housing cost burdened by income level	OVERALL		OWNERS		RENTERS	
	Count	Percentage	Count	Percentage	Count	Percentage
Less than \$20,000	11,991	90%	2,064	81%	9,927	92%
\$20,000 to \$34,999	7,308	59%	1,782	45%	5,526	66%
\$35,000 to \$49,999	3,284	27%	1,483	29%	1,801	26%
\$50,000 to \$74,999	2,113	12%	1,756	17%	357	5%
\$75,000 or more	861	2%	689	2%	172	2%
Total Housing Cost Burdened Households	25,557	26%	7,774	14%	17,783	42%

Housing Burden

In the FM Metro Area 43% of occupied housing units are rented. The price of renting coupled with low income is causing renters to become cost burdened - when housing costs require more than 30% of a household's income each month. Of the renters in the area, 42% are cost burdened, which is significantly higher than those owning a home at 14%.

RESEARCH RESULTS WHAT IS NEEDED

Respondents were asked about supports they felt were necessary to access housing, identifying that they needed:

- Available affordable housing
- Deposit assistance
- Ongoing case management/support services
- Reliable and affordable transportation
- Increased income or employment
- Ongoing rental subsidies

When asked about what would help them maintain stable housing, respondents identified employment, affordable housing, and transportation as the top three.

Top factors contributing to homelessness based off of the Everyone Counts Survey:

- Eviction or did not have leases renewed
- Not able to afford rent or house payments
- Loss of job or work hours cut

These are compounded when considering what other obstacles these individuals face when renting an apartment or seeking house ownership:

- Credit Problems
- No affordable housing
- Criminal backgrounds
- Bad rental history or past evictions
- No local rental history or references



FIRST

INTERVIEW WITH CODY SCHULER

Executive Producer of FM Coalition to End Homelessness

As Executive director, Cody Schuler works in partnership with other organizations to provide permanent housing solutions for the homeless in the FM Metro Area.



TOPIC: Understanding the resources needed for the homeless and how this can be addressed through architecture.

Key Issues Addressed:

- 1 The Housing First Initiative
- 2 Insufficient Social Safety Net
- 3 Considerate Design and the Social Stigma
- 4 Design for the Homeless
- 5 Establishing the Community Connection

The Housing First Initiative

One of the first topics addressed in the interview were what Schuler's general thoughts were of homelessness. The Coalition has taken careful data from the existing shelters in the area and through surveying which points to an insufficient safety net for the community. Schuler points this out stating that the option that will clearly benefit this population is providing housing before other services because having a place to comfortably live is something that is a human right. People experiencing homelessness suffer from a wide range of issues, so in order to address the sheer complexity of this population, it is easiest to provide them with a permanent means of housing.

Insufficient Social Safety Net

Schuler points out that the safety net for this population in North Dakota and elsewhere is deficient in allocating funds for beneficial services. Many resources provided are hard to qualify for as well, making the task of receiving support difficult. Providing a more permanent safety net would be beneficial in terms of sustainability. Schuler points out that if the homeless have less street exposure, they are less likely to accrue court and detox fees. The homeless now are more likely to visit the emergency room, which requires an ambulance for transport. They are also more likely to come into contact with law enforcement. Shelters are more expensive in the long run, compared to a subsidized home. These are all issues that can be solved by implementing a sufficient safety net in the community.

Condirate Design and the Social Stigma

Throughout the interview, Mr. Schuler explains the importance of designing with dignity. Congregate living for the homeless often labels the building that they reside in. If this building is designed well, this can alleviate the social stigma placed on the building and provide a better connection to the surrounding community. Design elements need to address things that pertain to the occupants. This can range from unit design from facilities. Units should be designed to meet safety requirements for clients and staff. On-site services, such as psychiatric care, nursing, and a reception help desk provide unique opportunities to provide direct care for clients. Amenities can act as healthy coping mechanisms, such as including a gym area for clients. These are all things that can help motivate clients through whatever they may be going through and add layers of support.

Design for the Homeless

Schuler stresses that a building designed for the homeless has to be in the same proximity as public transport and other public services. Locating a site that is close to these resources relieves the stress of relocating the homeless away from said resources. This also helps create an efficient environment for occupants and the people that help them through these services. Site diversity is also a key design element to incorporate. This is addressed through functionality. Schuler points out that typically when a large area is designated to the homeless, it is usually labeled a slum by the public. This can be circumvented if the only a select section is designated for housing and care facilities leaving the other portion for different services. This could include commercial areas that can also provide the homeless with job training, a university building for budding counselors and therapists, or public fixtures for community involvement. These spaces would have to have some degree of separation from the housing and care facilities.

Establishing the Community Connection

The best way to provide the community with a better sense of the complexity of homelessness is through education. This is something that Schuler says can help provide a more empathetic attitude towards the individuals in this vulnerable population. This can be expressed through certain educational and community spaces. It can even be captured through a public installment or gesture. The goal of these experiences would be to provide a better understanding of how many people who are homeless have different experiences.

Addressing the Complexity

The homeless population is diverse demographically and many suffer from a wide range of issues. Some suffer from problems with mental health, substance abuse, chronic illnesses. Some are very young and are either on their own or with their families. Some who have families already able to live on their own. Some are fleeing domestic violence and have a hard time being in large groups of people. The complexity of the population will have to be addressed through separation of spaces based on the well being of the occupant. This can be achieved by designing different spaces in the building for certain parts of the population.



TYPOLOGICAL RESEARCH

Shelters

Many shelters are inadequate. Early shelters were hastily set up in the basements, hallways and stairways of public buildings. Later the Salvation Army was created, establishing many locations throughout the country. The design of the buildings is quite simple. A large space with that provides the homeless with beds to sleep on and some facilities at best. During the day it closes, leaving the homeless to find a way to occupy their time. Life in shelters was not an ideal environment for individuals to grow. There was little to no privacy (Sometimes plastic was provided to separate beds). Sleep deprivation is common as well. Close conditions can also expose the people staying there to illnesses, one that is particularly bad is pneumonia. This issue is extremely applicable in regard to the state of the world today with the spread of Covid-19. Weaker tenants can be subjected to assault and are more vulnerable to the spread of disease. Accommodations for these problems could be made to provide more spaces for bathrooms and increasing supervisory staff, but this is not commonly done due to increased maintenance cost. Shelters also lack any supplementary services for the homeless. There are no facilities for social workers or counselors to help people suffering from many different crises. With little resources and supervisory staff members, shelters also are perceived by some homeless as dangerous. This distressing view of life in shelters causes people to stay on the streets. Davis details in the book a youth in San Francisco who went through this ordeal, avoiding services through a resource group in the Golden Gate Park area. He would only visit a newly constructed shelter during the day and retreat to the park during the night. His health declined during a harsh winter and he would not have survived if he had not accepted the shelter services. For this youth, the mere idea of staying in a shelter was so repulsive that he risked his life to avoid it.

Modern Shelters

Shelters have adapted since their earlier design. Davis makes this clear through the two examples given in this section. Both are in Los Angeles where there is a prominent homeless population, and both are large scale shelter projects. These projects were solely intended to serve as shelters, so they do not inhabit the basement of public buildings. Each are estimated to have cost around 30 million dollars to build and offer a wide variety of spaces to the homeless populations they serve. The goal of these projects was to create a safe area for these individuals, where police were less apt to arrest for minor violations like panhandling and also where service organizations can be relocated. One of the first prominent shelters was the Los Angeles Mission, initially designed by Scott MacGillivray, and completed by Virginia Tanzmann in 1992. This building resembled and operated as an academic building. First new admissions were giving a bunk bed (similar to the early sleeping accommodations of shelters) with a hall supervisor. The occupants then can transition to better room accommodations through advancement in education modules and prayer service. Facilities included a chapel (the most prominent architectural element within the complex), a state-of-the-art computer classroom, a full-size gymnasium complete with bleachers, a health clinic, a barbershop, and a weight room. The design of the building, although institutional, conveys a clear message that this was created to help the people that it serves. Another shelter that fulfills many of the same programmatic needs is the larger Union Rescue Mission. This building is similar in many ways, but design conveys a different message that we are here to help, but this is not your home. Each place provides incentive for occupants to progress to independent living. One unique detail is the segregation of women and men in the buildings. The Los Angeles Rescue Mission helps a small population of women and children. The Mission also has separate entrances, courtyards, and other living spaces for these populations. This is due to the complexity of these issues and the potential that living in the same proximity as men can trigger past abuses or cause new ones. This speaks to the complexity of the homeless population. There is not one analogous picture of a homeless person, in reality they suffer from a wide range of issues that is reflected in the design of these missions.

RESEARCH RESULTS | HISTORICAL PRECEDENCE OF SOCIAL HOUSING



RESEARCH RESULTS | HISTORICAL PRECEDENCE OF SOCIAL HOUSING



Flops, Residential Hotels, and Lodging Houses

This section of the book refers to very inexpensive living arrangements known as “Flops” or “lodging houses”. These were especially prevalent during the Great Depression, in New York there were hundreds referred to as cubicle hotels. These came in many varieties that were governed by what the individual could afford. The more money, the more solitude.

Flophouse

This building type was the least expensive of the variations. It was typically a row of cubes in a building loft. The walls usually did not reach the ceiling for cheap ventilation purposes. The ceilings were chicken wire, which kept out people known as “crawlers” and “lush divers” who attempted to steal things inside the rooms. Each floor of cubicles had a single bathroom and staircase. These floors were often unsupervised, with the only supervision being a clerk on the bottom floor in their own cubicle. Lighting was usually very poor in these spaces. Windows were usually placed at the end of the hallways only rendering some cubicles absent of light. Very few of these exist today.

Flophouse Redux

The Flophouse Redux was a reconceptualization of these dreadful cubicle hotels. Led by the executive director of the nonprofit Common Ground Community Rosanne Haggerty, the project is intended to offer the homeless a better alternative to living on the street. Haggerty coined the new design as “First Step Housing”. This design was reimagined and inspired by the capsule-like compartments of the tower in Japan. Common Ground purchased a building to repurpose and created spaces similar in design. These were low cost and could be assembled on site. The basic design resembled that of the cubicles but incorporated better amenities. Although cost was low, it still does not provide the services needed to rehabilitate some occupants. However, it does provide an opportunity to get off of the streets.

Rooming Houses and Residential Hotels

These typically met building codes and were more thoughtful in design. Design of each living quarter was centered around a lightwell that brought natural light to each space. Each room was small and had its own wardrobe, bed, and desk. The relative proximity of the adjacent rooms made privacy hard to come by. One resident Paul Groth describes this absence of privacy as observing other people's life patterns through the response of the architecture. People who shared the same light well typically knew the habits of their neighbors from hearing them. This structured their lives based off of their neighbor's schedules. It made neighbors oddly familiar. Many of these residential hotels had shared bathrooms, kitchens, and living rooms. This building design seems pretty well thought out and architects often came up with inventive design solutions to get every room a window for example. There are a few problems that arose, however. Aside from little privacy, price played a significant role in how nice your accommodations were. The worst at around \$100 were described to have cockroaches. The best were in the \$265 price range.

RESEARCH RESULTS | HISTORICAL PRECEDENCE OF SOCIAL HOUSING



RESEARCH RESULTS | HISTORICAL PRECEDENCE OF SOCIAL HOUSING



The Streets

The past design solutions are temporary or short-term living arrangements aimed at reducing the exposure on the streets. Many architects believe that reducing this exposure is the best way to handle the social problem of homelessness. Others believe that transient people choose the lifestyle and are not a danger to themselves or others. They are maladjusted but we should just let them live on the street as long as their lives are secure, safe, and hygienic. This line of thought typically leads to a form of micro-design. Tiny living designed for people who prefer to live on the streets ranges anywhere between a cardboard house with a corrugated steel roof to a modular, factory produced home. One of the most prominent of this design came from an architect from San Francisco in 1987 named Donald MacDonald. He created the "City Sleeper" which essentially was a wooden box raised on car jacks. There were many thoughtful considerations in the design of the box, however. The entry opened like a station wagon, creating shelter from the rain and sun. There was a foam mattress inside along with shelves and a window. Finally, the box had large openings on the bottom and top for proper ventilation. The design was specifically tailored for the homeless men who lived in the adjacent lot to his firm. His general aspirations for these individuals were based off of his view of their mentality which entailed living in isolation with likeminded transient people. MacDonald thought these structures would be a welcome sight to local municipalities, but the boxes were ultimately removed from the site. The largest problem with erecting structures, like the City Sleeper, is that they do not comply with local building codes and zoning ordinances. Police also become frustrated when dealing with vagrancy laws they have to comply to. Ultimately the design is good in theory but very hard to execute without jurisdiction.

Encampments

Encampments embody the life on the streets, often congested areas that are repeatedly disbanded by officials leaving a wake of dirty furniture and paraphernalia on the ground. It is costly to disband these areas and clean them, some homeless joke that "housekeeping" has arrived. The evolution of encampments may disprove the underlying thought that the homeless prefer living on the streets. When left undiscovered, these encampments are built up in a way that reflects a functioning community. This is most prevalent in the documentary "Dark Days" where a homeless encampment was discovered in the tunnels of New York City. The encampment had sustained itself for twenty years and had a space for kitchens and functional furniture. The population that lived in this encampment had tapped into the water pipes and spliced electricity. Another group in Oregon known as Dignity village relocated so many times that the city finally gave them a lot to build their encampment. When refereeing to their accommodation's residents said they lived in transitional housing. Many of these communities were focused on positive ideals receiving the names of Dignity and love, giving the residents a feeling of belonging. Dignity village conceptually is a good thought, but it still provides challenges for its residents. The entirety of the camp still lives in tent like structures and are subjected to Oregon's constant wet climate. The site it is located on does not have good drainage, prompting people to raise their tents with wooden platforms. The village is also constantly seeking approval and funds from local municipalities to continue operating. Another more successful example is the Dome Village in Los Angeles created by activist Ted Hayes and architect Craig Chamberlain. The dome inspired design by Buckminster-Fuller is constructed on a cement platform and made of fiberglass. This community sought approval through the government and operates through a real estate agency making it legitimate. One of the most important aspects elaborated by Hayes is the sense of community. He believes that sharing with others is necessary in rehabilitation. Many amenities on the site are communal, but individual domes have very nice interior space. Davis mentions that both these projects try to achieve dignity for their occupants. There is a very fine line between stigma and pride. A place of residence can offer shelter for an individual but also mark their living arrangements in societal standards as exclusively poor. Another aspect they share is that both create a sense of pride and self-governance within the individuals who live there. This can be instrumental in the development of said individual, but does it allow them to seek out better accommodations if they are comfortable with where they are. Both address this with limiting people's time in the encampments.

RESEARCH RESULTS | HISTORICAL PRECEDENCE OF SOCIAL HOUSING



DESIGN ELEMENTS

PROS

Can provide sense of community
Permanent shelter if legal

CONS

In most cases illegal
Shelter usually does not protect from the elements
Can be dangerous

RESEARCH RESULTS | HISTORICAL PRECEDENCE OF SOCIAL HOUSING



Supportive Housing

Commonly known as one of the most successful forms of housing for the homeless, supportive housing typically integrates some work in on-site social service programs in the occupant's lease. In exchange they are given living arrangements with nicer facilities and amenities subsidized by a non-profit organization or the government. The underlying issue with the past forms of housing is in order to get nice living arrangement occupants had to pay higher amounts that they may not be able to provide. This one incorporates nice, subsidized living arrangements with the opportunity to get help through on-site services. The supportive housing model is the best out of the prior for the development of individuals who no longer wish to live on the streets.

WHAT IS PROVIDED BY THE COMMUNITY:

Shelter:

- Offers temporary shelter(lodging) for homeless households

Transitional Housing(TH) :

- Participants must enter into a lease agreement (sublease or occupancy agreement) for at least one month. Leases must automatically renew upon expiration, except with prior notice by either party, up to a max of 24 months.
- Participants receiving rental assistance may be required to live in a specific structure.
- Support services must be available during either participation in TH.

Rapid Re-Housing (RRH):

- Provides short-term to medium-term assistance (up to 24 months).
- Lease between households and landlord
- Household's able to select their unit
- Providers can restrict max length of financial assistance but no length of time in unit.
- Support services must be offered during entire participation in RRH.

Permanent Supportive Housing (PSH):

- Long-term housing
- Homeless households with a member who has a disability
- Support services provided that are designed to meet needs of participant

Other Permanent Housing (PH):

- Long-term housing not otherwise considered PSH or RRH
- PH Housing with Services provides long-term housing and supportive services for homeless persons but does not make supportive services available as part of the project.



RESEARCH RESULTS | THE COMPLEXITY OF THE HOMELESS POPULATION

DESIGNING FOR THE HOMELESS

Project by Joseph Bakke

This section is an examination of the lives of the homeless based on the interviews provided in a past research project by Joseph Bakke. These stories are made based off of interviewing the homeless and literary research. Bakke uses these two research methods to discern the best way to design for these individuals.

This will add depth to design decisions in the project and help recognize the needs in individual spaces for different occupants. The needs of the homeless are extremely complex and each situation will need to be addressed with the proper design response.



Deborah - Single Adult Female

Age : 25

Story : After high school, my boyfriend got a job offer that he couldn't refuse. We relocated together and I began working in a restaurant. Shortly after, I got pregnant. This is when my boyfriend began to change. He started to come home from work mad and take his anger out on me and would make me stay home instead of going out with friends. I stayed with him for the sake of our child, but his behavior started to get worse and eventually enough was enough. With no one to turn to, I ran away with my child. I tried to find work and a place to live, but I couldn't afford child care or anyone that would rent to a single mother with out a job history.



Psychological Needs :

- Seeking companionship
- Needing a support system
- Curing anxiety about source of income
- Improving self sufficiency with job training
- Seeking permanent housing
- Wanting to trust again
- Seeking domestic abuse.
- Fear of losing her child

Architectural Responses :

Domestic abuse alone is enough to make people scared to trust again, but the fear of losing a child on top of that can leave people feeling helpless. The design for Deborah will include a separate area for women and children. It will allow for mothers and their children to stay together and get the assistance that they need. The spaces will be private apartment like dwellings. An individual case manager will be assigned to each family so they can form a close relationship with one authority figure at a time. This will help them to learn to trust again at a slow pace. The program will involve assistance in finding permanent housing, job training, and therapy. With this design, there will also be businesses along the ground floor that will allow users of the shelter to work and earn a wage while learning valuable skills.

Charles - Mentally Ill

Age : 75

Story : After serving in Vietnam, I developed Post Traumatic Stress Syndrome. I began using drugs to cope with my situation. I was unable to hold a job or afford housing given my situation. I am now ashamed of my appearance and addiction that I resist outside help.



Psychological States of Being :

- Needing a support system
- Suffering from mental illness
- Impaired by addiction
- Fearful of being closed in
- Fear of personal space being violated
- Self-conscious of hygiene and appearance

Architectural Responses :

Designing for mental illnesses is no easy task. A majority of the homeless population has a mental illness and it is important to create a design that reflects this. The design for Charles will use acoustic privacy and areas of refuge. It is important for people with PTSD to feel safe and secure in their environment. The areas of refuge will have low ceilings with warm colors to provide a sense of security. It has been shown that humans feel the safest in areas with dissipated light, warm colors surrounding us, and clear lines of site to surrounding areas. For sleeping, people that are suffering from mental illnesses will have their own private spaces. This will provided them with their own sa fe space. The overall design will have an open concept and be naturally light to help it feel open and inviting. The program will include addiction therapy, group therapy sessions, and rehabilitation. Group therapy sessions will be used to form relation ships between the other users of the space and help to them form a support system amongst each other. There will also be space for users to receive the proper grooming and hygienic services.

Kayla - Young Adult

Age : 19

Story : When I turned eighteen, I lost access to financial, educational, and social supports provided by the child welfare system. I ended up homeless after not having the proper life skills for life on my own such as how to balance my budget, or pay rent. I want to be independent, but I lack the skills to do so.



Psychological States of Being :

- Seeking companionship
- Needing a support system
- Improving self sufficiency with job training
- Seeking life skills training
- Scared about safety of the shelters

Architectural Responses :

The rate of homeless young adults has been on the rise lately and a lot of it is due to the fact that they don't have the proper skills after high school or after living in foster care to live on their own. It is estimated that nearly 20,000 young adults age out of foster care every year and around 40% of them end up homeless. These young people need their own space to learn the proper skills to pursue a life on their own. A design for Kayla will include town-home like dwelling that will house up to five people at a time. These town homes will be grouped into communities separated by community spaces. This will help to create strong connections throughout the community and create a strong support system. All users will be evaluated to ensure the safety of others. Each person will be given their own room within the town-home which will provide security and their own personal space to care for. It will give them a sense of ownership and belonging. The program will provide class on job and life skills and also give them opportunities to apply this training. There will be business within the facility where users can work for a wage. The program for this shelter will also help to find permanent housing for the young adults. People will be allowed to stay in the shelter for up to 18 months. It is important to set an end date to give the users a reason to take in the information and also ensure they pursue a life on their own. The program will teach them everything they need for a life on their own and then give them the opportunity to apply it to their life.

Chris - Ex Offender

Age : 28

Story : After spending four years in jail on drug related charges, I was released and began the search for an apartment. Every where I looked, I was met with denials and discrimination. No landlord is willing to rent to an ex-offender. I have lost hope and now I have returned to using drugs again.



Psychological States of Being :

- Needing a support system
- Seeking permanent housing
- Impaired by addiction
- Seeking life skills training

Architectural Responses :

Many ex-offenders run into the problem of not being accepted after they are released from prison. Even though they are trying to have a better life, but the constant discrimination causes them to resort to their old ways. The design to help people like Chris will be mostly based off of the program. The program will focus on drug addiction and rehabilitation. People in the program will have certain limitations such as restrictions on cellphones and belongings. People will also be required to participate in the therapy sessions and classes. This will ensure that they are there to get help. People will be evaluated weekly and will be searched every time they come back to the shelter to ensure that no narcotics make it into the shelter. Group therapy sessions will be held to help people find others that are going through the same struggles as them. This will help to create a support system within the shelter. It is important to be surrounded by people with the same goals. While getting help with addiction, case managers will help to place them in permanent housing when they are ready for a life on their own. Classes will be taught to give them the proper job and life skills to provide for themselves.

Joan - Immigrant

Age : 40

Story : I fled Venezuela in search of a better life. I am an undocumented immigrant which makes it hard to find a steady source of income. I am afraid to use shelters because they may turn me into Immigration and Customs Enforcement. I want to be able to find a steady job and be able to afford my own house.



Psychological States of Being:

- Needing a support system
- Curing anxiety about source of income
- Improving self sufficiency with job training
- Seeking life skills training
- Fearing the unknown

Architectural Responses :

Many immigrants come to the United States and are unaware of what they are getting themselves into. For many, the U.S. is a much safer place to live, but it can be just as hard to make a living as an undocumented immigrant. As an undocumented immigrant, they are unable to seek the same assistance as other people that are experiencing homelessness due to the fear of deportation. To avoid this, the program design will provide a sanctuary space for undocumented immigrants, meaning that when they come to seek shelter they will not be turned into Immigration and Customs Enforcement. Instead, the shelter will help them to seek the proper documentation to become a legal immigrant. The shelter will also provide a place for work for a wage and also receive other job and life skills training. Many immigrants come to this country and are unaware of the assistance that they can receive. This design will also include an outreach team to go out into the homeless communities and inform them about the services the shelter can provide them. It is easier for people to seek help if they know exactly what they are getting themselves into. Once people know they are safe, they can come to the shelter to receive the care that they need. Within the shelter there will be areas to congregate and allow for relationships to form. Coming to the United States is a scary endeavor to conquer alone. But by providing a safe place for these immigrants to find a better way of life, we can help them along their journey.

Marcus - Bad Experiences

Age : 46

Story : After having some bad luck in my life, I became homeless. I have been to a couple different programs and shelters looking for help, but every time I go I am shown how unsafe they are or I am miss-treated by the facility. For my personal safety, I have chosen to stay out of the shelters and to get by on my own.



Psychological States of Being :

-
- Needing a support system
 - Scared to trust again
 - Worried about the safety of the shelters
 - Scared of authority
 - Fearing the unknown

Architectural Responses :

Safety and Security is a main concern in every shelter. This issue will be tackled through tactics such as screening, psychological evaluations, maintaining privacy, and a no tolerance policy. These tactics will be used to protect all users of the shelter. The lobby of the building will have a locked entrance to protect the people inside off of the lobby there will be a screening room to evaluate the people that are coming into the shelter to better understand their needs and to make sure they are safe to be around other people. People wont be allowed to enter the shelter if they are intoxicated or are using other substances. People that have been deemed a danger to others will be placed into their own private rooms to give them the space that they need. People staying at the shelter will get their own sectioned off space and other users wont be allowed into eachothers spaces. The sleeping quarters will be monitored tomaintain the safety of all users. People will be able to interact in the community spaces which will be located adjacent to the sleeping quarters. This will be an open, naturally lit space that will promote interaction between the users. This space will allow for relationships to forms and create a support system amongst the users.

Kyrie - Not Seeking Help

Age : 45

Story : As a child I was abused, so as soon as I turned 18 I left home. I didn't have anywhere to go so I worked odd jobs to earn money while traveling around the country. I have never held a steady or had a permanent place to stay. I have always been able to provide for myself and get by on my own. It's not a Psychological States of Being :great life, but it's what I need.



Psychological States of Being :

- Seeking purpose
- Needing therapy
- Fearing the unknown
- Seeking short term care

Architectural Responses :

Kyrie may not be advisedly seeking help, but he could still benefit from basic services such as a place to eat, sleep, and shower. A separate area will be created will be created for people that feel the same way as Kyrie. They will be able to come and get the services they need and be able to come and go as they please. The design will include a central courtyard for people to hang out in during the day and also to sleep in at night. The courtyard will be monitored by security guards to ensure the safety of everyone. A cafeteria and public restroom will be connected to the courtyard to give easy access. The cafeteria will serve two meals a day and will serve anyone that comes. The restrooms will include showers and hygiene kits to give everyone the opportunity to maintain their personal hygiene. Along the Courtyard there will be a set of businesses that will give people that are experiencing homelessness the opportunity to get a job and work for a wage. By being in this environment, users will began to form relationships and companionship. Hopefully, this will start to pull people into the other programs that are offered and they will began to seek help.

INFLUENCING HOMELESSNESS THROUGH ARCHITECTURE

The Architect and the Homeless

“Architecture reflects social attitudes, aspirations, and values” – Sam Davis

Architects design things differently to evoke emotion out of the public body. Davis provides an example of this through the design of churches and government buildings. These are large, commanding structures that are supposed to leave bystanders in awe of their magnitude. Mansions and corporate headquarters are built to define the status of their patrons. He points out that in the 1960s, many architects view providing social housing, mainly low-income/affordable housing was a professional responsibility. Research conducted on the social and cultural implications of dwelling design focused on how dwellings reflected identity, applying to both the inhabitants and to others not residing there.

“For most people, the self is a fragile and vulnerable entity; we wish therefore to envelop ourselves in a symbol-for-self which is familiar, solid, inviolate, and unchanging.” – Clare Cooper Analyzing the solutions provided to the homeless in the past century, Davis discusses the SRO (single-room occupancy) unit. This option persists today in some form, the other option is the streets. His investigation does not only include the failures of some, but also provides insight into how architects have molded some of the ideas into more considerate design solutions.

What can Architecture do?

When considering thoughtful design for a place of refuge, there are a lot of factors to consider in the design phase. A significant thing that should get the most consideration is designing with dignity, as Davis points out. Creating an institution to harbor the homeless can be demoralizing and can also place a stigma on the facility from the surrounding community. Building design needs to be tailored in a way that does not socially exclude it, is comfortable for its occupants, but is not too comfortable/provides incentive to become socially dependent. There are many complex reasons why people may be staying there as well. Davis concludes that a place that makes people feel safe, comfortable, and welcome signals to those individuals that someone cares about them. Choice and self determination are cornerstones of dignity, and a homeless person has few options. Knowing this, an architect can create many diverse spaces to provide people with choices.

The Social Contract

This dilemma, although invisible in some sects of society, should have the attention of everyone. Davis goes on to state that architects came to realize that not only is it our job to design buildings for conventional use, but it is our job to create healthy places for everyone to live. Aspects of a building like air quality, ventilation, interior finishes, and plants have a significant effect on the psyche of the people inhabiting that building. Recognizing this, should not every space required to help someone regain their footing in the world have these features? It is not ethical to deny people adequate shelter when societal bias is blocking a potential road to success.

PROJECT JUSTIFICATION

The topic of the project is important for me because part of my design philosophy is to create healthy environments for individuals who will occupy those spaces. Some people, my target clients, do not even have the option to live in such spaces. This is mainly due to many variables keeping them in a state of homelessness and lack of social support. I personally believe housing is a right and should be provided to every person in our society. Academically it helps provide me with a knowledge of research tools and the processes of how to share/expand on said research. It is important because it establishes issues that I and my classmates think are important. Researching these issues and implementing solutions through design can define what we are interested in pursuing in the future.

Homelessness is a very broad issue that is already being addressed through very few design solutions, if a good model is established to address this issue it can be implemented all across the country, if not the world. This question was said beautifully by the executive director of the Coalition to End Homelessness. They have done extensive research in providing permanent housing, and they found that allowing the homeless to reside somewhere permanently saves the city expenses through detox programs and court fees. It would also help lessen the burden for local resources, such as shelters and mental health facilities. Overall, it is a more sustainable idea for a social network than the one we provide today. In the long run it will benefit communities with allocation of resources and cutting extra community expenses. I believe deeply that housing is a human right. Everyone should be housed because it is the foundation of an individual's life. It is substantially harder to achieve any form of success if you do not have a place to reside at the end of the day. A part of the macro level of the Coalition is lobbying funds to provide resources for the homeless. This is mainly government spending. However, there are alternative routes. Donations is another thing that can help fund construction, whether it be from an individual or organization. A good example of this is the Joan Kroc Center in San Diego where the local pastor raised funds to create a similar center for the homeless. It is a more sustainable model than having short-term shelters and facilities, so it is a return on time and money required to maintain these facilities. It is also a return of money on the community due to expenses the homeless cannot provide, such as detox and court fees. It is mainly justified by giving people who need housing a place to seek shelter and grow. If people are allowed to grow and become successful, they become assets to a community.

The current culture around homelessness in our society is toxic. People have a fundamental misunderstanding of the situation most of these people face. Many view the homeless as incompetent and lazy, when in reality they suffer due to many complications (Mental health, abuse, and other traumas) and some are even born into homelessness. The hope is to incorporate the center into the community instead of isolating it. This could shift the social view around the issue and focus it on community healing, instead of placing the blame on an individual. To summarize, we are placing the blame of an issue created by our society on the individual, rather than placing it on the society. The spot is the prime location due to the proximity of community provided resources. It is across the street from the bus station hub in Fargo, which many in the homeless population rely on when traveling. It is close to Family Healthcare and the women's clinic, which provide healthcare resources to the impoverished. The Fargo Public Library is across the street and offers free internet access and other services. It is also close to facilities like the salvation army, which provide services such as food pantries. Lastly, there are a lot of opportunities for employment for occupants in the post-occupancy stage. it would act as a model addressing design based on dignity and safety for homeless individuals to live in. Seeing how big the issue of homelessness is, I believe this project is imperative for our society and culture. I am passionate about this issue and I want to find the most thoughtful solution for everyone that will be using it. I want to design it in a way that does not socially isolate individuals, that makes healthcare workers feel comfortable, and that makes people in the community realize the true components of homelessness.

Post-occupancy for individuals who live in the space I am envisioning would help these individuals become independent and give them a chance to become successful. It will also help the community because another individual introduced to the community is another asset to the community. One of the goals, which I think is related to creating a healthy space for people to live in, is to create a building that is good for the environment. In order to achieve this goal, I will review sustainable solutions to implement in design, such as site orientation, heating and cooling solutions, and sustainable energy production. incorporating sustainable features saves in built up maintenance costs. This would help the center save money in the long run.

PERFORMANCE CRITERIA

Examining the performance criteria for this section, I concluded that the one that would make my project the most compelling would be Psychological Impact. I chose this one in particular because one of the overlying goals of my project is to form a connection between people who are experiencing homelessness and those who are not. This would essentially introduce people to the fact that homelessness is not defined by laziness or incompetence. One of the ways this criterion can be met is through aesthetics. Most places that provide the homeless with support are institutional buildings with an institutional aesthetic. This is typically designed in a way that puts function over psychological needs of the occupants and can be seen through settings in clinical buildings such as Prairie St. John's. It also defines the building as institutional and in turn labels it so. This can be studied through careful analysis of buildings that offer services to the homeless in the FM Metro Area and interviews with the people who occupy those spaces. In order to properly judge success in this criterion, the ending result will have to be something that balances between institutional design and design for a typical mixed-use residency. It should be designed with dignity and should not make the building stand out from others.

Another big aspect of this criterion is how the final built project will connect with the surrounding community. This will be heavily influenced by the exterior facade and site design. In order to establish a sense of connection, the site will have to be welcoming and interact well with the adjacent buildings. This would be best measured through on-site visits and GIS mapping. The exterior facade should incorporate well with the surrounding buildings. This will not necessarily be achieved by using the same materials and building forms, but by making sure materials and forms complement the surrounding buildings. This can be measured through careful documentation of the buildings surrounding the site and the materials used in their construction.

Lastly the criterion can be met by establishing sensory experiences on site. This is something that should be handled carefully because some occupants could react negatively to overwhelming sensory experiences. This will mainly be addressed through artistic installations on site based off of a parti. A parti will provide a stronger message of connection and healing. It can also be reflected through the form of the built environment. This would be judged based on the cohesiveness it has between the other elements of this criterion.

To conclude, these variables will hopefully act as a means for community connection and healing. This will allow the occupants to remain as a part of the surrounding community without feeling the effects of social isolation.

THESIS

FINAL



PROJECT TYPOLOGY

Mixed Use Rehabilitation



Care

Health
Permanent Living
Resources



Community

Community
Education
Understanding



Growth

Job-Training
Economic Sustainability
Independence
Social Freedom

Women's Health
Clinic



Matbus Terminal

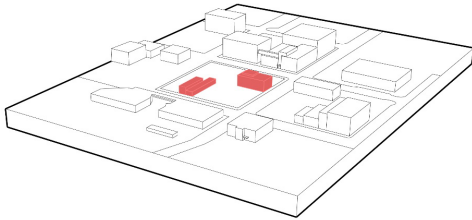


Fargo Public
Library



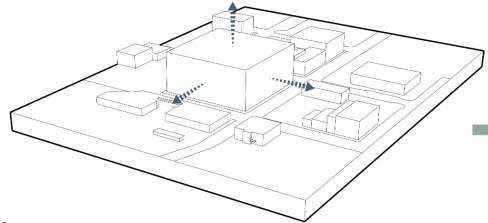
Family Healthcare





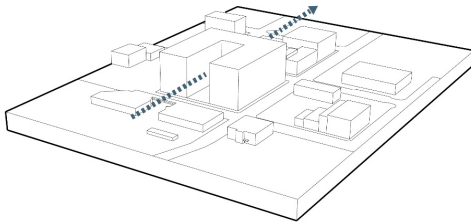
Demo

Two existing buildings taken down to fit building on site.



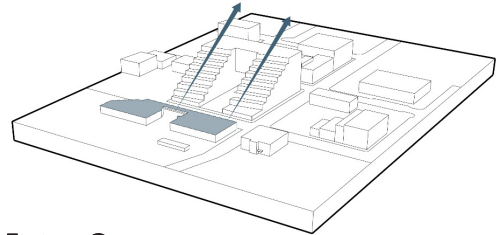
Allowance

Set building allowances for height and perimeter of building



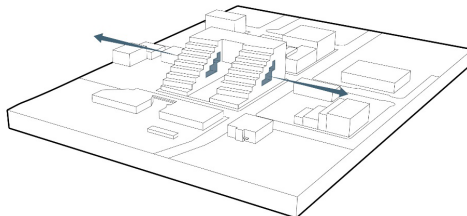
Circulation

Path cut from South to North of site to make center outdoor parkway and allow for better access to the bus station on the south side.



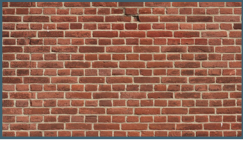
Fitting Context

Stepped form created to meet the height of the bus station and to create a vertical neighborhood aspect for occupants living in these units.

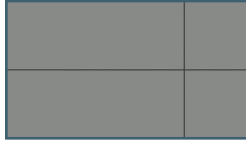


Lighting

The form steps back from the south side allowing the units to optimal sun. A middle cut in the form allows natural light to get to other parts of the building.



Brick



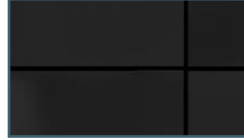
Aluminum Siding



Wood Paneling



Glazing



Dark Siding



Planting

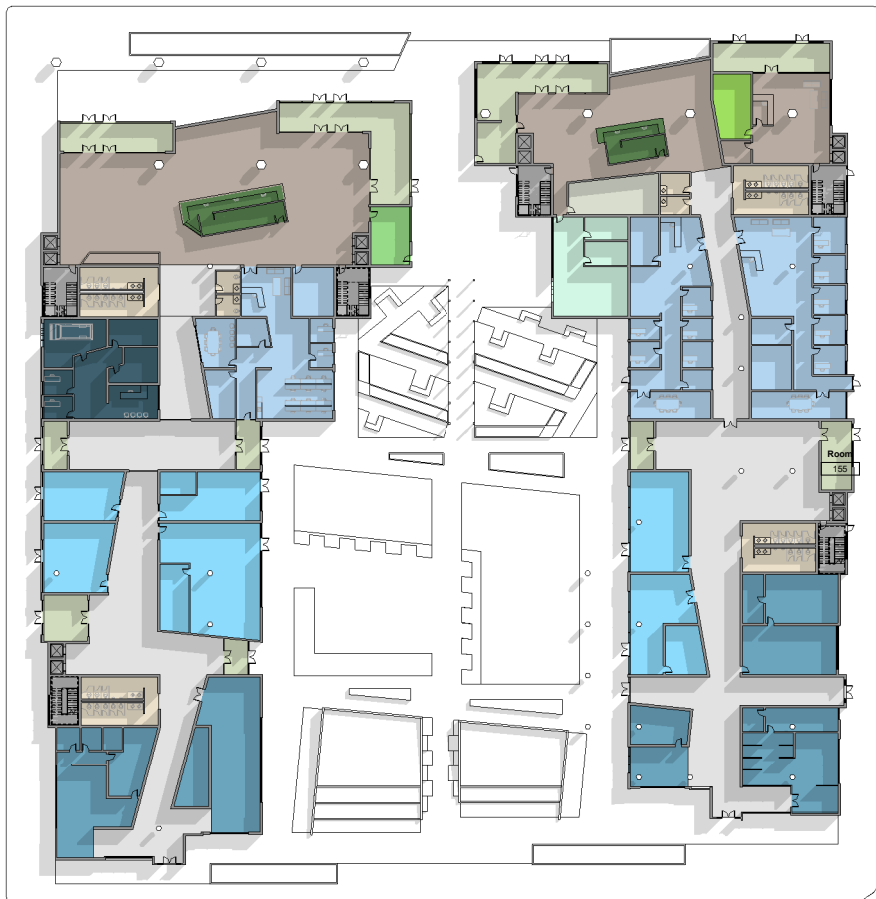
Materiality

Accents



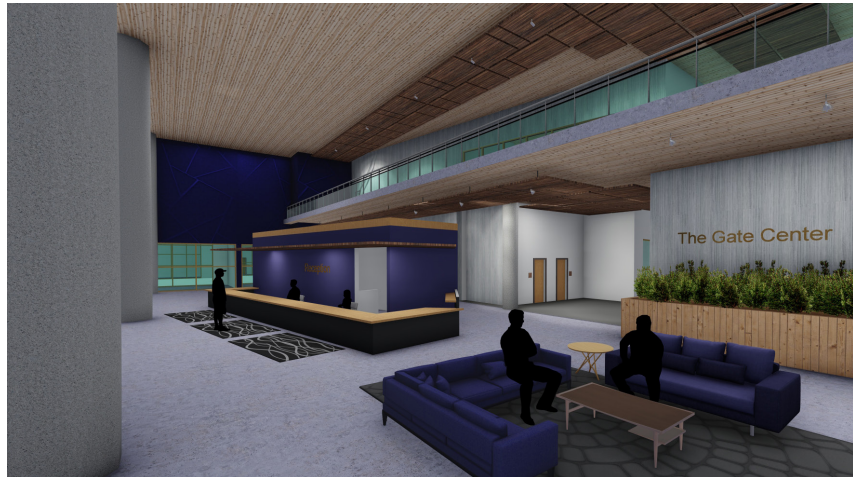
Department Legend

- Bike Storage
- Circulation
- Commercial
- Community
- Emergency Clinic
- Janitor
- Lobby
- Mechanical
- Office Space
- Reception
- Restrooms
- Security
- Support Space
- Vestibule



Ground Level

Main Lobby



Community Garden



Community Space

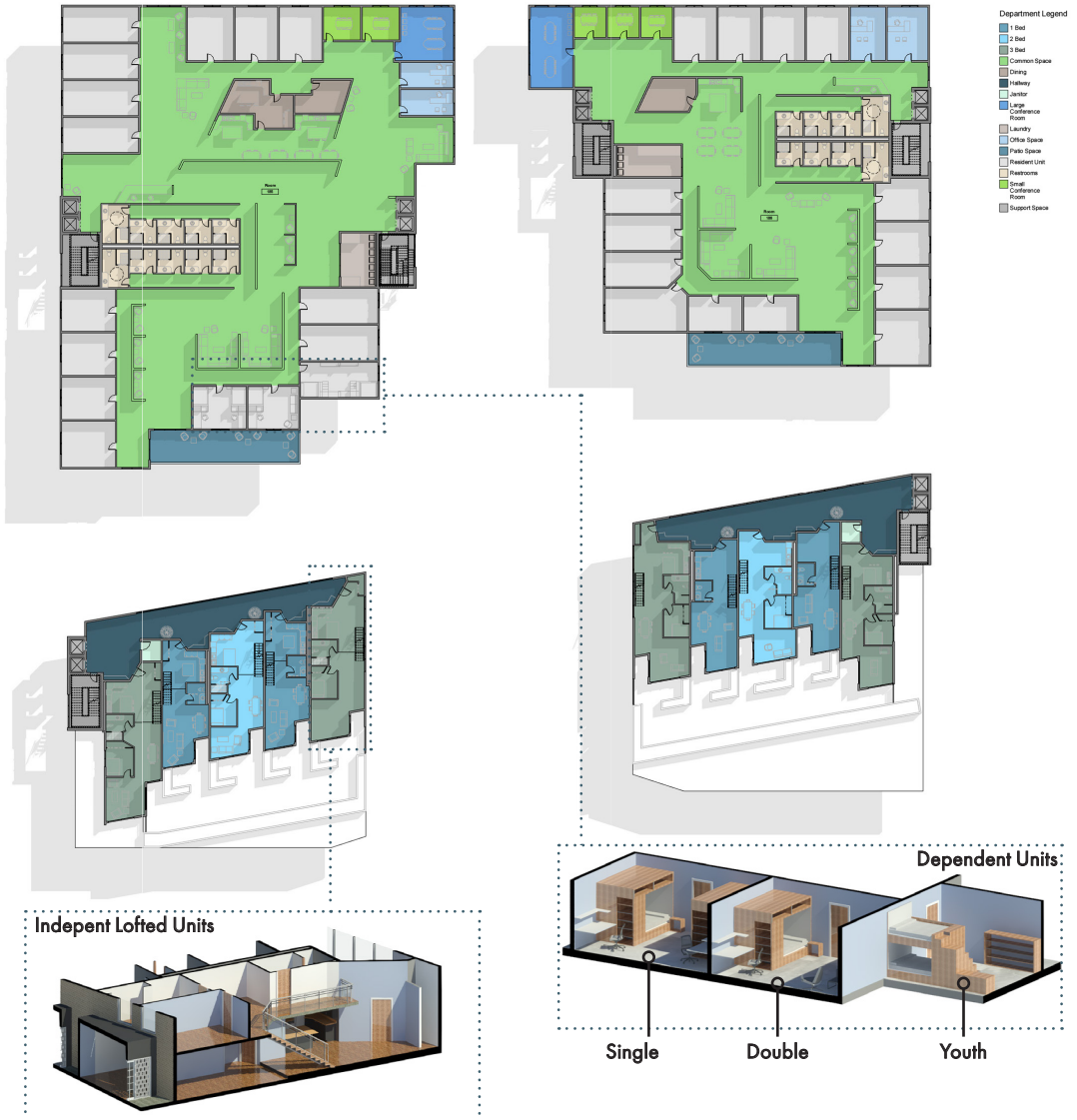


Central Plaza



Green Waiting Area

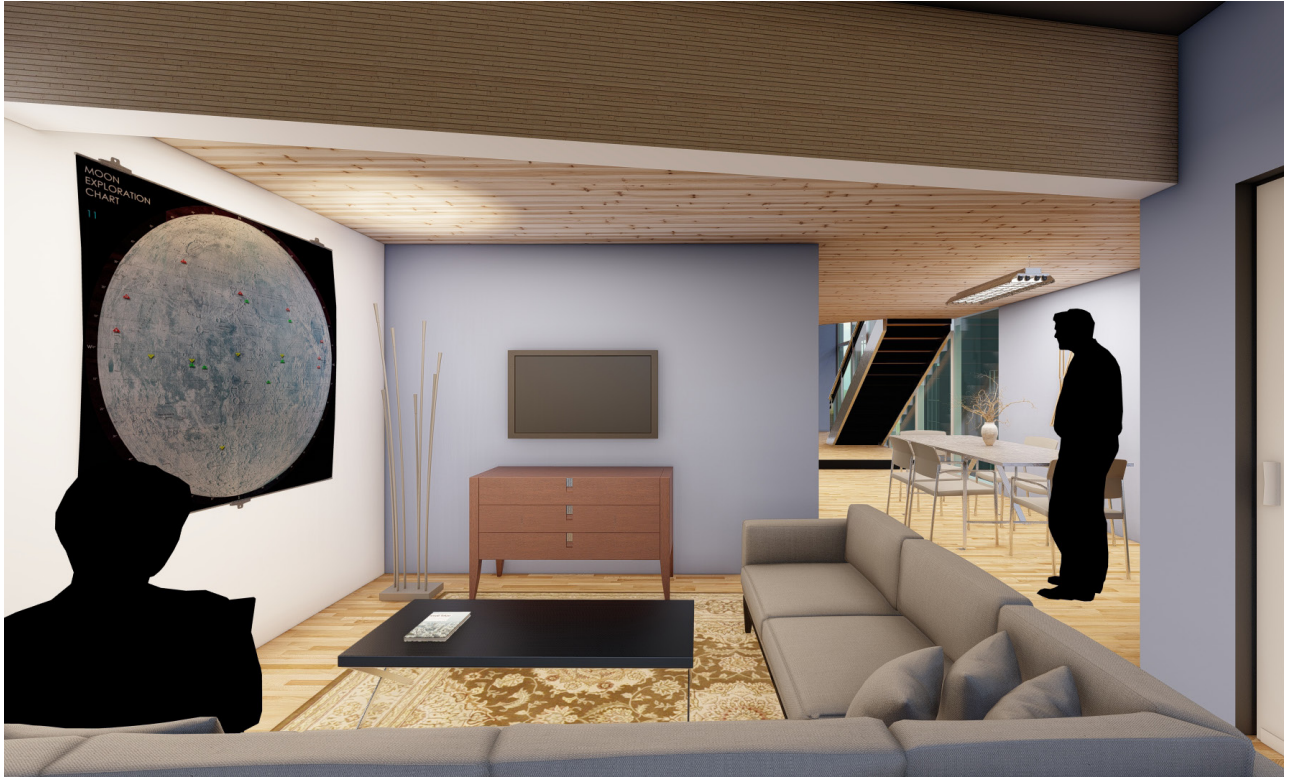
Level 2 Dependent and Independent Living



Dependent Living



Independent Living - Hallway



Independent Living - Living Room

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