PIERSON COMMUNITY DEVELOPMENT
This book is dedicated to my parents. To my father for providing me with a chance that he did not have and to my mother for teaching me that no matter how difficult life gets, everything will somehow work out.
"It is easy to design a great museum or office building, but so very difficult to design good housing."

I.M. Pei
CONCEPTION/PHILOSOPHY/THOUGHTS

This thesis is the culmination of a part of my formal education and a Genesis to the direction my professional career will take. There have been many different forces that have brought me to my present stance on architecture and in particular the needs of the urban environment and its users. My interest in the urban environment began through my own indecision or the lack of a clear understanding of what path in architecture I wanted to follow, what I wanted out of architecture, and what I thought that I could give it.

Through a design project working with self-help housing in an urban environment I began to see a direction that I could take that would solve my indecision. I could design buildings, landscapes, and do planning all in the framework of urban design. I furthered my interest in urban design through participating in an urban design studio and later working at the Muncie Urban Design Studio. These experiences further solidified my decision to pursue urban design.

Through my studio experience and my work experience I realized how much I enjoy going into a community and dealing with "real people", along with the hardnose professionals that I had previously always dealt with during my internship. I also soon realized that the concerns of people in communities and what they thought were the most important issues did not always correspond with my thoughts. This difference between the priorities of the user and the architect is a common occurrence that needs to be addressed.

This fissure shows that it is vitally important to know the users, not just the client (financier, developer, etc...), but the actual user. There has to be an understanding of their culture or sub-culture, their wants, and needs. Not enough people in this profession, especially some of the more prominent ones, have learned this lesson or they have cared to ignore it. Classes that study architects and their philosophies have brought me in contact with some of our more prominent practitioners. Many of these people don't really know what their clients want and need. Yes, as architects we are supposed to be able to know what is good for society. But do we really have the right to tell people what they want, what they need, and that they are to survive in a place that is innovative, stylish, and has made the cover of "Progressive Architecture", but does not satisfy even their basic needs. Architecture should be sculptural, exciting to look at and be in, but it must also
function. "FORM FOLLOWS FUNCTION!" is an old expression, but shouldn't it still apply? Architects should design first for the user and his needs and realize that even what they think of as a small insignificant project will affect someone and as an architect they should have a social responsibility to those they affect.

The social responsibilities of the architect, or lack thereof, is what brought me to the subject of my thesis and the location of a site in downtown Indianapolis. During my internship I worked with a developer that acquired old apartment buildings and renovated them for upper income housing. Neither the developer, architect, nor myself ever gave much thought to the previous residents of these apartment buildings. I did become aware of their problems when I received a notice from the developer that I had been working for, telling that the building was to be renovated and that I was to be evicted. My neighbors with close jobs, the elderly on fixed incomes, and people that had established homes had to find new places to live with the only help from the developer being an option to move into another building at three times their present rent.

I realize that it is not the entire responsibility of the architect or developer to take care of everyone they affect, there is a price for progress. They, or we, should, however, make some effort to provide for the people that are paying the price for our progress.

Indianapolis is a city that is making a major effort to progress through growth and the improvement of their existing amenities. The downtown area is changing at a fast rate. New hotels, sports complexes, commercial buildings, and office buildings are being planned and executed continuously. This growth is bringing more people back into the downtown area. Many of the old apartment buildings, once abandoned for the suburbs and given to the lower income residents are being returned to the upper income. Indianapolis is making an effort to provide housing for the lower income and elderly that are in need. I believe, however, that there does not have to be the separation of housing, there is a need for housing in the downtown area that is for all income levels and ages. This coexistence of different income groups, cultural backgrounds, family sizes, and ages will breakdown social stigmas between different groups and will establish a strong downtown community.
acknowledgements

There are many people who have had a part in the development of this thesis and the following book. Professor Don Woodfin and Professor Tony Costello were the two people who contributed the most by giving me guidance, and allowing me to develop the project as much on my own as possible. I would also like to give special thanks to Scott Truex of Indianapolis's Department of Metropolitan Development for supplying me with an enormous amount of information on my project site and for taking time to help me through the first stages of the project. I would also like to thank Barbara Perry of Near North Development Corporation and Don Perry for supplying me with the history of the area as well as the thoughts and attitudes of the residents and commercial users in the area.

In addition to the people that contributed to the project directly, are those that helped me when the light at the end of the tunnel became that of the oncoming train. I felt a great sense of accomplishment when the project was completed, and these people were there to help me celebrate. For this, thanks goes to all my family and friends and especially to Chris and Eric.
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Introduction

Contained in the following pages is a synopsis of nine months worth of work. It, by no means, includes all of the work done but does illustrate, in a condensed form, the steps taken in the design process.

The catalyst for this extensive study is a thesis statement which is defined as "a statement of a position held on an issue in architecture in such areas as philosophy, aesthetics, design process, technology, creativity, or the impact of other disciplines. The thesis presented here deals with the urban environment and specifically with the development of a new community. The thesis statement is as follows:

USER NEEDS: Multiple dwelling projects are often done on such a large scale that people, then subsequently, the design, are reduced to a single generic unit that that causes their needs to be unfulfilled. Housing needs to be designed on a very detailed personal level to give the user a needed perception of personal space.

PERSONALIZATION: Personalization, or individual control over one's environment, must exist on a personal and community level to create territory, which in turn establishes an image and a sense of safety.

DENSITY: For urban land to be used as moderate and low income housing, a density of units per acre must be established to make the housing economically feasible for both the occupant and the developer.
SOCIAL MIXTURE: A mixture of people from different income groups, cultural backgrounds, family size, and age should all be facilitated in housing developments. A stronger community feeling is established when different lifestyles interact and learn from each other, thus breaking down the stigmas created by social barriers. Perceived problems of vandalism and lowered property values will not be prevalent if a strong community is established.

LAND USE MIXTURE: The mixture of commercial use and housing is beneficial in providing the resident with the proximity of amenities and employment possibilities, while both benefit from the continuous use of the area. Housing requires parking, safety, low noise, easy traffic flow, community areas, and a sense of protection that sometimes clashes with the needs of the commercial users. Good design, the use of buffers, and the flexible use of space will overcome the problems of coexistence.

These statements are the basis for the nine months of study completed and are reflected in the text and illustrations which follow.
I. THESIS CRITERIA
research

This section of the book deals with the needs of people in an urban environment, both physical and psychological. Criteria that will address these needs has been compiled through research of written works, in field studies and evaluations, and through experience gained from design studies and lecture classes.

Although many books were used as references there are two which are major contributors to the criteria, those are Oscar Newman's Design Principals for Creating Defensible Space and Nathan Straus's The Seven Myths of Housing. The former work deals with urban housing and the problems that have developed because of designs for housing that don't supply the resident with a feeling of ownership and control over his environment which Newman terms "defensible space." Through Newman's guidelines for defensible space, criteria that applied to the thesis was formulated. The second work deals with myths that have been formed and accepted as true by many people. Myths dealing with slums, government housing, and low income residents are brought forth with arguments for and against the myth. The myths are then proved false through examples that conflict with the myth and through research data. The research data and the examples of successful projects provided criteria. The other works used are listed in the bibliography.

Field research done by myself was also used as a reference tool for the formulation of criteria. A field research sheet that listed specific things to look for in each neighborhood was used to make data consistent. The field guide dealt with the neighborhood's relationship to commercial areas, neighborhood definition, proximity to specific amenities, public areas, building characteristics, parking, and housing.
in Muncie, Indiana; two neighborhoods in Indianapolis, Indiana; a section of Greenwich Village in New York; and a housing complex in downtown Manhattan, New York. The data was compared and criteria was drawn from it.

The final source was personal experience from design studios dealing with urban design and with the psychological aspects of users and how space is perceived. A lecture class, entitled Environmental Psychology, was also instrumental in formulating criteria dealing with the way people perceive space.

The criteria that has been compiled from these sources is to be used as a design guide. Although the criteria does deal specifically with my thesis, it can be used as a design tool or checklist for similar projects. The criteria is presented in an expanded outline for. The major issues of my thesis are used as the basic structure for the outline. Each major issue has been broken down into smaller more precise issues that are addressed with a set of criteria in text form.
criteria

LANDUSE MIXTURE

A. An active and safe community must have a level of continuous use.

1. Day/Evening/Night Usage:

A combination of land uses such as housing, community spaces, and commercial uses will help to cause a continuous flow of people throughout a community. When residents are at work and children are at school, the commercial business areas will give the area activity during the day. The return of the residents in the evening will replace the activity that decreases with the closing of the commercial businesses. The activity in the community will continue into the evening with the use of the interior and exterior public areas. This continuous use of the community will give it vitality.

There is a need for people to get out of the house during their night time leisure hours to relieve the tensions that build up during the day. Many teenagers especially have a need to feel free of their parents and go out at night to socialize. There should be areas and facilities in, or close to, the neighborhood to accommodate this need. If the community gathering areas are close to the residential areas, then the elderly can easily use them and feel safe because they are not traveling far from home. Parents can go out with their children and still be close to home for convenience. Teenagers can socialize away from their parents but still be close to home so that they will be "seen" by residents of the neighborhood, and their parents will feel more comfortable knowing where and in what kind of environment their children are.

2. Economic Revitalization:

The continuous use of a public space that has concentrated amenities will be beneficial to the economy of the area. If there is a variety of activities for everyone in the community, local businesses will be able to feed off of them. It would be mutually beneficial for these businesses to stay open later to serve the users of the area.

3. Crime Deterrent:

The continuous use of an area decreases the likelihood of vandalism, crime and personal violence. There is also the possibility of less vandalism when the people in the area are in frequent personal contact with the owners and employees of the establishments. The active use of an area can also influence its security through the advent of better lighting and increased security precautions.

The areas that present the opportunity of a high crime risk, such as shops that have large glass storefronts, and storage areas for commercial users, should be visible from the active areas in the community. Positioning these areas close to pedestrian paths that are often used, or next to streets that are active with traffic and patrolled by police, will give natural security to these areas. The locating of these areas next to activity nodes in the community also gives them security by the presence of people and lights. These areas are seen as being safer because of observation by both pedestrians and people in cars.

4. Commercial Cooperation

To get a high level of use in an area, there is a need for a level of cooperation among the business establishments in the area. The commercial and community service areas should coordinate themselves into a single marketable unit. Special events should be coordinated to include all commercial and community services so that they can benefit from each other's individual drawing power.

The businesses must also be diverse enough so as to attract a diversity of people such as the elderly, teenagers, and families. They should be grouped
C. The building placement on the site affects the use of the spaces, the image of the area, and the circulation of the area.

1. Circulation:

The placement of the buildings and the creation of exterior spaces should address and enforce the circulation. You can provide definition of

bumps. The entries for automobiles and for trucks to the community service and the commercial areas should have easy orientation and function in a manner that accommodates each. The entries to the residential areas should give the perception of entering a gate to the community so that they create the image of a semi-public domain. This entry image can be brought about through site design and landscape elements.

1. Pedestrian Circulation:

With the restriction of exterior traffic through the residential area there should be little undue hazard to pedestrian movement.

Circulation between the community service areas should follow paths that provide interesting views, different degrees of openness and enclosure, and places to stop and sit.

The paths should follow the natural flow from node to node, such as buildings or landscape elements (seating areas, fountains, sculpture, etc...), or paths that are worn through continual use can be used as evidence of a need for the placement of a permanent walkway.

The areas that are used for pedestrian travel should be made safe by providing adequate lighting and assuring the absence of blind spots. Safety can also be increased by having pedestrians cross traffic at specific established points and a change of materials can make drivers aware of a pedestrian crossing.

1. Vehicular Circulation

Although the composite of residential, commercial, and community service are seen as an integrated whole, the circulation needs of the different users are not the same. Thus, they must be kept separate or controlled. The circulation within the residential area will be primarily that of the residents going to and from their homes to work, school, entertainment, and shopping. The commercial and community service areas will have traffic unfamiliar with the area and also that of servicing with large trucks.

The traffic within the residential area will primarily be that of the residents and visitors to the neighborhood. Traffic that uses the residential street as a "short cut" causes congestion and danger. Drivers speed through the area because their intention is to pass through the neighborhood instead of stopping somewhere within. These people are not familiar with the areas where children are present and the places where they are likely to cross the street. The commercial traffic consisting, of drivers unfamiliar to the area and large trucks, needs to be given access to their destination without crossing through the more private and lesser used "neighborhood" streets.

Possibilities for reducing the negative impact of cross-traffic through the residential area are: creating one-way or dead end streets, narrowing or curving the streets, a change of pavement, or using control devices such as medians and speed...
circulation by creating an edge through landscape elements that will direct it and give the path interest. The buildings should not be placed in such a way that they become obstacles in the paths between major activity nodes. If the path of circulation is for pedestrians, the buildings should reflect this scale. If the circulation is for vehicles, an appropriate scale is also needed.

2. Commercial Circulation:

The commercial areas will be utilized by people outside of the immediate area as well as by those within. A greater quantity of traffic to these areas will result. This quantity of traffic, along with the speed and noise that accompany it, should not be taken through the residential areas. (See Land Use B-2) To prevent this, the commercial areas should be located on the periphery of the neighborhood where they will have direct access from peripheral streets.

3. Community Service Image:

The community service areas, although a major component of the proposed residential community, should still be available to the surrounding residential and commercial areas. The community service areas should also appear as an integral part of the residential community, while portraying an open and non-intimidating image to users from outside the immediate residential area.

4. Residential Configuration:

The housing configurations should reinforce the traditional image of the urban area by addressing the existing neighborhood fabric and scale. The housing should address the street, thus promoting interaction between the neighbors who are across the street from each other. Housing should not be removed from the street, which is an area in a neighborhood that can contain the most activity. Children watch their parents leave for work and parents watch their children go to school by the street. Children play ball and ride their bikes in the street and the neighbors visit across the street. Entries that face the street will extend their sphere of influence onto the sidewalk and the street, giving residents greater control over the area facing their entry. Residents are then able to keep a surveillance of their street if they face each other across a lighted street. Visitors are also able to recognize the entry if it faces the street. Houses fronting the street also provide a backyard area that is more private and promote interaction between residents with adjacent backyards.

5. Exterior Public Space:

Residential outdoor public space should be designed so as to accommodate a wide range of users. These may include various sized areas for small children to play in, places for people to sit and talk, areas to ride tricycles and bikes, small basketball areas, and green areas. This gives the community a mixture of private, semi-private, and public spaces instead of just private and very public spaces. These areas should be dispersed so that a small group of homes will have an area that their children and their playmates can meet in and play, while remaining within a controllable distance for parental supervision. These spaces can also be used by other family members and will cause interaction between neighbors. Activities that are on a larger scale, such as full court basketball, tennis, and volleyball, will be used by more than the immediate community and should be placed so that they become an extension of the community buildings.

D. Parking is a necessity that takes up a large amount of space and can potentially create relationship problems for the residential and the commercial/community areas.

1. Residential Parking:
The parking areas for the residents should not be concentrated in one large parking lot. The distance that a person can be expected to walk from their car to the entry of their house depends on the user. Elderly people and parents who will be carrying things and controlling children should have parking close to the unit entry, or possibly have the parking attached to the unit. Teenagers and single people who don’t have these limitations can be expected to be able to walk a greater distance from entry to car. The distances people can be expected to walk can be extended if the walk is protected from the elements. The minimum number of parking spaces per unit will be derived from the zoning and building codes. (see program)

To provide the parking that is needed without the negative effects of a large parking area, a combination of different types of parking should be used.
- On-street parking provides a close proximity to the front entry, minimizing the effects of weather and increasing safety. The car parked in front of the unit can also serve as a buffer to the street that makes the area between the unit entry and the car personal territory. The car also serves as a territorial marker and as a symbol of self-esteem.
- Parking at the rear of the house, either in the garage or carport, decreases the safety because there is less public surveillance of the back of the house. It does still provide a degree of safety through close access to the house.
- Parking that is attached to the house is in some aspects the ideal situation because it does provide the greatest deal of safety and protection from the weather. If this is the only means of parking, it can do away with some of the positive aspects of on-street parking already listed and in some cases detract from the livable area of a unit.

2. Commercial/Community Area Parking:

The parking for the commercial and community areas can be both on-street and off-street parking. Even though a large amount of parking is required by code, it should be divided into smaller lots separated by barriers. Thereby limiting the visual impact of the parking lots and keeping parking close to the individual user it is serving. The lots can be placed near nodes of activity so that they receive public surveillance. (See LANDUSE A-3)

If there is not enough land available or the need for security cannot be met, a very dense area may find it cost effective to build underground or rooftop parking lots.

3. Parking Entries:

The entries to the commercial parking areas should be easily recognizable through its design and signage. Community area parking should also be designed and noted to be recognized, but users of these facilities will be more familiar with the area and will require less direction.

4. Delivery Truck Servicing/Semi-Trailer parking:

Delivery trucks servicing the small commercial and community spaces should be able to park for short periods close to the service entries. An unloading area should be provided that is convenient but would not interfere with outside public spaces. The parking of the semi-trailers of the large commercial users should be an open area where the trucks could turn around to park at the service dock.

A parking lot that would allow trucks to pull straight into the parking space, drop the trailer, and pull straight out could be used if the entries and exits are placed to accommodate it.

E. Buffers are needed between the areas that are not totally compatible because of the noise levels created, the visual impact of the area, and because of a safety factor.
1. Noise Level Buffers:

Buffers will need to be created between areas that have a high and low noise level (play areas, commercial areas, community areas, nurseries, elderly housing, etc...). Building placement can be used to create buffers or barriers between areas where the building won’t be affected by non-compatible acoustic needs. Landscape elements such as trees, vegetation, and berms can lower, or give the perception of a lowering sound transmission.

2. Visual Barriers:

There is also a need for visual buffers between the residential areas, commercial areas, community areas, and the private exterior spaces of the homes. The places where there is visual clutter, such as between the parking area for the trailers and the parking for the community areas, should screen the visual impact of the mass of parking but yet should still afford views into these areas for safety. Landscape elements that can act as partial see-through screens could work in this manner.

3. Safety Buffers/Barriers:

A third kind of buffer or barrier is needed for safety purposes. Barriers, that prevent children from easily wandering into the street and prevent toys from going into the street that might otherwise create a hazard for the driver and the user, are needed. Landscape elements, such as trees, shrubs, fences, and walls can be used to provide this barrier without negatively affecting all of the interior and exterior views. Building placement can be used to create barriers between the areas of play and the busy areas, such as the street and commercial areas.

G. The exterior space that surrounds the buildings must be designed with the same considerations as the interior space to give a positive image.

Exterior space must be designed for an intended use and users. It shouldn’t simply be left as vacant undesigned, under-utilized land. A user and the activities of the user must be established so that the space can be designed to accommodate them. An outdoor room must be created that has enclosure, both vertically and with the overhead plane as an interior space has. This can be done through the use of building mass as well as with landscape elements.
DENSITY

Various densities in housing have assets and liabilities. A high density residential area promotes interaction among neighbors but limits the outside personal space. Low density areas that give more personal space tend to segregate the residents because of low personal contact with their neighbors. A density must be established that uses different aspects to achieve an optimum relation between building mass, percentage of site covered, ratio of public to private outdoor space, etc... and thus obtain a positive residential community.

A. Building placement must take advantage of the assets and limit the impact of the liabilities in higher density housing.

1. High Density/Low Land Coverage

Ground Relationship:

High density/low land coverage buildings often inhibit the resident's relationship with the surrounding community spaces. Exterior spaces are not distinguished as an area designed for a specific use or user. Because of this, these areas are often ill-used, ill-kept, and pose safety hazards to residents because no one will assume responsibility for them. This can be minimized by building placement that defines an edge to semi-public spaces oriented or related to a specific residential group. If the buildings are placed so as to provide this relationship, then the residents will perceive these as being part of their territory and will be more likely to assume responsibility for their maintenance and supervision.

2. High Density/High Land Coverage

Ground Relationship:

Building placement in high density/high land coverage buildings should make the best possible use of the available land. The buildings should be placed so that the spaces created are perceived as a territory by a single group of families. In an urban setting the placement of buildings along the street creates a territory between the front of the building and the street. If all of the open land has someone who accepts responsibility for it, it will be maintained better and be safer for all the residents.

B. Building Type:

1. Height:

Density can be increased by adding floors to the building thereby increasing the building height. There are limits to the building height that must be observed to have the project successful. The scale of the building must be in context with the surrounding buildings. A large scale change among the elements on the site will cause the continuity of the area to suffer. The building height must be adapted to human scale as well.

Housing that has too many floors presents difficulties for residents in that they cannot identify with the land surrounding it. Outside areas are often too far from the units for the residents to perceive them as a part of their territory so they feel no responsibility for the spaces' maintenance and supervision. Parents will most likely not allow their children to play in an area that they feel they have no control over and do not have quick access to.

The height of the building also depends on the user. Single people may be able to live in a taller building because they don't need the quick access to the ground as parents with small children playing outside need. Younger people can also be expected to walk up more floors than the elderly. The elderly often need the use of an elevator for all but the ground floor, so a taller building may be appropriate because the added expense of the elevator is already required for the lower rise building.

2. Configuration:
One factor in the density that a building can obtain is its configuration, or geometry. A simpler geometry gives more livable square footage per wall area so it is more economical. A less dense building type can be used and the project can still be economically feasible.

The use of a simple geometry to obtain greater economy should not stifle the design. Expression of the individual unit and excitement in the building can be obtained through small-scale manipulation of the geometry, the inventive use of materials, and the careful design of the interior and exterior spaces.

3. Parking:

The parking in high-density areas is often inadequate for the number of residents. Parking must be provided in safe, close proximity to the housing entry. This can be obtained by breaking down the parking into small parking spaces that are centrally located for a determined number of units. Parking on the street, available, is a solution, along with the use of grouped garages that are either attached or detached. The parking areas may also become dual purpose. If a large quantity of people drive to work, the parking areas could become paved play areas during the day. Parking under the housing unit is a solution that would incur added cost but could be worthwhile in that it could increase safety, convenience, and would give more open land. (See LAND USE D-1)

4. Entry:

The main entry to medium and high-density housing is often shared by more than one unit. Townhouses are able to use a single private entry, but multi-level units often use a single common entry. Because of the lack of personalization of the shared entry, the least number of units possible should share an entry with the most being six. If too many units share an entry residents' territorial influence will not extend into this shared space and there will be no responsibility taken for its maintenance and supervision. Buildings that use elevators to serve a floor comprised of several units should have buffers that separate the individual units' private entry from the public elevator lobby. This buffer can be as drastic as an intermediate locked door or as symbolic as a short wall. If there are no elderly residents, a change of level can also be used. Because of the publicness of an elevator lobby, a doorman may be needed to screen visitors. This is especially true in elderly housing.

5. Unit Size:

The unit size greatly affects the possible density of a housing type but should not drop below comfortable standards if there is difficulty in reaching the needed density. Adequate minimum dimensions should be maintained in the housing unit with a more efficient use of space being used to increase density. Circulation should be kept to a minimum and should be integrated into the living areas wherever possible so there is a dual purpose in the spaces. Integrating spaces that have similar functions or function at different times will increase efficiency. This multiple use of spaces will lessen the total space requirements and add to the possibility of greater density.

6. Views:

The views in medium and high density housing are often sacrificed due to the limited exterior wall area. There must be an efficient use of available wall area along with an efficient use of the desirable exterior views. A building must be designed to provide the proper density and still give the largest amount of exterior wall area while addressing energy issues that large glazed areas incur. Code requirements will specify minimums of glazed areas. The areas in which views are the most important will be determined by the user's requirements.
Views out the kitchen so parents can supervise their children's play while they are working and from the living room where the family spends most of their time together are important considerations.

7. Household Amenities:

The density of the housing will affect the amenities such as the trash disposal and the laundry. In high-density housing there must be a system that efficiently disposes of trash without having a negative impact on the site. In housing where there is a street front for the units or an alley, the trash can be taken care of by the individual unit. In larger complexes, a large common indoor or outdoor holding bin may be used or possibly integrated into the building structure. Laundry facilities that are not within an individual unit are cumbersome and cause the inefficient use of time. Household jobs that can normally be accomplished during the laundry time cannot be done away from home. Parents who have to use outside facilities have the added trouble of supervising their children. Laundry facilities could be provided for each group or complex if individual units are not provided with facilities. Laundry facilities in each unit can be economical if the family is large enough to use them often.

8. Construction Methods and Materials:

If economical construction methods and materials are used the total cost of the project can be kept within an appropriate budget, thus causing the required rent to be lower, more floor area given to each unit, or the required density that is required to be economically feasible can be reduced. The use of construction methods that will require the least amount of specialized workers or the lowest number of construction unions involvement will result in lower cost.

The materials chosen should be derived from the design intent and should fit the image and fabric of the surrounding areas. To lower the cost the materials should be readily available within the immediate area, along with readily available craftsmen that are trained in their application. The materials should be cost effective. Less expensive first cost materials that require a large amount of maintenance, over a period of time may become more expensive than a more expensive first cost material that requires little maintenance. Less expensive materials may not be cost effective if they jeopardize the quality of the building. More expensive materials that will cut sound transmission, for example, may be more cost effective if it results in a lower turnover rate in residents.
SOCIAL MIXTURE:

A. There must be a definite element(s) desired by all of the different social factions that will bring these people together on an equal basis so that social barriers are no longer recognized.

1. Social Elements:

Elements that bring people together on an equal level are most notably sports, entertainment (movies, T.V., plays, music, etc...), business, and crisis situations. Providing the community with one or all of the first three will establish a common link among the users of the area.

* A health club that serves the immediate and surrounding communities could be used to bring the people together.
* Bringing the children together through organized play, or inter-community competition, will bring families together through the children and sports.
* A community center that provides areas that are special for the different age groups, and makes available meeting and party areas, will bring the different social segments together.
* A complex or set of buildings that provide areas for music to be performed or movies to be shown, along with exhibit space for local artists to display work, could be used.
* A place where small businesses are community owned, and provide community employment, can be developed.

2. Physically Accessible/Psychologically Inviting:

The complex or set of buildings must appear to be inviting to everyone. The entry must be easily recognizable and accessible by all, especially the elderly and handicapped. The image should fit into the surrounding community, but should also promote and encourage use by people outside of the immediate community. This can be accomplished by placing it in a prominent place on the site, setting it on the outside edge of the residential area, and through the architecture of the building(s) and landscaping itself.

3. Community Center Image:

Even though the community center will be a prominent element in the area it should still fit into the image of the residential area and also into the surrounding fabric. If the building(s) fit(s) in, the residents are more likely to feel a possessiveness that will aid in the security and control of the activities in and around the community spaces. The image must then be open but protected. The community areas must appear inviting but controlled.

B. Housing must be provided that gives variation, so that people with different needs, wants, and social backgrounds can live together.

1. Unit Size:

Different sizes of units should be provided and they should be dispersed throughout the area. There should not be segregated blocks of single bedroom units, three bedroom units, elderly housing, etc...

2. Personal Variation:

Personal variations among residents should be able to be accommodated through variations in the individual units.

Various amounts of exposure to the public areas should be provided throughout the residential area. Some people like to be very private and stay away from very public places. Porches at the entries can provide a screen to the front of the house, or placement of private spaces away from the activity areas of their neighborhood can be used. Other people enjoy the aspect of watching public activity and being "seen". Providing seating spaces open to the public areas through porches or balconies provides for interaction between
residents and public activities. Location of the units close to the public activities areas will add to the degree of public exposure. The placement of the personal spaces for the units can also promote an open or enclosed feeling. They can be located at the front and/or rear of the house, and can have a wide range of levels; ground level, elevated a few steps, or removed completely from the ground plane such as a balcony, to regulate the publicness of the space.

There should be units that are near the areas where children play for the people that enjoy hearing and watching their activity along with areas that are separated from the children's areas.

Needs for the elderly and other special users should be met— the need for short walks to amenities, little use of level changes, the need for elevators to upper floors, etc... There are also differing preferences among the elderly as to whether they enjoy living among younger people or people their own age.

USER NEEDS:

A detailed list of the needs and the design to satisfy these needs are in the program matrix.

PERSONALIZATION:

1. Landscaping:

Housing units with a ground connection should have the ability to landscape the areas in front and in back of the house. A small garden in front of the house will create a transition area between the public and the private and will add personalization to the home. Housing units that do not have a ground connection need to have exterior areas that they can personalize. The exterior space should be designed as a room, not as an attached afterthought. The space should be given enclosure, either by bringing wing walls out or by depressing the exterior area into the mass.

2. Automobile:

Personalization can also come from the automobile and the prominence of its visibility. If there is a parking space at the front of the house, you can personalize the home with the car. It also forms a boundary between the personal space of the house, the semi-public space that is formed at the sidewalk, and the public space of the street. (See LAND USE D-I)

3. Entry:

The entry to the unit should be personalized so an individual identity is perceived so that children and
Visitors can readily recognize it. The personalization may come from the individuals by using socially recognized territorial markers (flower and rock gardens, potted plants, lawn sculpture, etc...). If the entry is not at ground level there should be space provided outside the unit entry that will provide the ability for this personalization. You should try to create the image of the front personal entry even though the entry is already a part of a more public entry.

4. Configuration:

The need for a high density of housing often does away with imaginative housing forms and geometries. Using the building mass can add to the personalization of the individual unit. You can create an undulation of the exterior wall that will provide space for small gardens. Upper units can use potted plants on a balcony to achieve this. If there is a variety of forms that may have just slight changes in the geometry, then each user will be able to identify their unit more easily because of its unique qualities.

5. Interior Spaces:

The interior spaces of the housing unit should also supply personal spaces for each family member. A place in the household where special items are displayed adds personalization to the area. These needs are cited in greater detail in the program matrix.
II. PROGRAM
SITE LOCATION:

Indianapolis, Indiana

The site is located directly north of Monument Circle. The project will cover most of the area from Illinois Street to Meridian Street from Fall Creek to 22nd Street.
building use

**AMENITIES**

* There is a large variety of commercial uses including I.V. Tech, a podiatrist, eye doctor, beauty shop, dry cleaner, and a variety of fast food stores all within a three block area.

* Two elderly housing apartment buildings are being constructed on the west side of Illinois Street (1).

* Existing houses on the east side of Illinois Street (2,3) can be moved to fill in vacant land on the west side of Illinois Street.

* The five apartment buildings that face Fall Creek Parkway (4) can be revitalized to provide housing with a pleasant view to Fall Creek, as well as revitalizing the apartment building that fronts on Meridian Street (5).

* There is presently work being done to use Tutwiller Cadillac's vacant building on Meridian Street (6) as a branch post office for the area.

**LIABILITIES**

* Gas stations and other small businesses do not reinforce the continuity of the Meridian Street streetscape because of ill use of land and cause visual clutter because of non-compatible signage.

* The existing houses on the east side of Illinois Street are in very poor condition. One is being used as a tavern (2) and the other is abandoned and boarded up (3).

* The Fall Creek Parkway apartments (4) are in very poor condition with one being boarded up.

* The Unification Meeting Hall (7) is seen by residents as being "out of its element".

* Tutwiller Cadillac has two abandoned buildings (6,8) on the site and an under-utilized maintenance area that is removed from the showroom location (9).

* There is an adult entertainment area that is seen as "out of its element" and is an eyesore (10).

* Commercial uses have eroded the residential fabric back from Meridian Street to Kenwood Street on the west and Pennsylvania Street on the east.

* The commercial buildings and land are generally in poor condition.
OBJECTIVES

* To encourage compatible patterns of development by utilizing the wide range of uses in the area and by integrating the existing buildings and their uses with new developments.

* To integrate the businesses visually through the use of support hardware, signage, and street furniture.

* To establish a boundary to the commercial area that will establish an edge and prevent the commercial area from once again eroding away the residential fabric that surrounds it.
open space

AMENITIES

* Fall Creek has the potential for becoming a recreational area that would serve the existing neighborhood, the Meridian businesses, and new developments. It would also serve as a pleasant edge to the area.

* Some of the vacant land on the west side of Illinois Street is now being utilized as elderly housing.

* There is a large potential for development that would raise surrounding property values and improve the area's image without the destruction of valuable land.

LIABILITIES

* Fall Creek has not been used to its full potential because of the lack of water access; deteriorating walkways, floodwalls, and bridges; and overgrown, cluttered banks.

* Most of the open areas on the site are paved and are not well utilized or are totally vacant.

* Open grass and paved areas are unkept and have become garbage dumps and weed ridden.

* The large amount of poor open space, causing a view of missing teeth, creates a lack of continuity in the streetscape.
OBJECTIVES

* To utilize Fall Creek to its full potential by following through with the present plans to provide a pedestrian walkway and improve the image of the water front.

* To tie the open spaces of the new development into Fall Creek's pedestrian walkway and open spaces.

* To use the vacant land that is available for developments that will improve the image and the property values of the area.

* To better organize the parking needs of the existing businesses to minimize their effects and to clean up or screen the areas that are to remain.
landscape elements

AMENITIES

* Street trees have been planted along Illinois Street and the west side of Meridian Street.
* The existing residential area has good street and backyard tree cover.
* All of the streets are very well lit.
* Tall bushes have been used to screen the mortuary parking.
* Pines have been used as an attempt to screen the junked autos in the Mercedes-Benz maintenance area.
* Meridian and Illinois Street's curbs, sidewalks, and streets are in good condition. Meridian's sidewalks and curbs have recently been replaced.
* Fall Creek Parkway is to be made narrower to provide space for a landscaped pedestrian walkway along the creek.

LIABILITIES

* Street trees are not yet mature and are in need of maintenance.
* Mature trees are disfigured, dying, and are in a great need of maintenance.
* Utility poles proliferate and are visually cluttering.
* High fences with barbed wire surround most of the open space. They are obtrusive, provide an image of high crime and danger, collect garbage, and are a trellis for weeds.
* The streetscape suffers because of a lack of landscaping, non-compatable signage, and the use of billboards that break up continuity and disrupt scale.
* Fall Creek Parkway and 23rd street's streets, sidewalks, and curbs are only in fair condition.
* Pierson Street's sidewalks, curbs, and street are virtually nonexistent because of Meridian fronting businesses using it as a service alley.
OBJECTIVES

* To bring a pleasant visual order to the streetscape by the use of signage, landscaping, and street hardware that is compatible and at a pedestrian scale as well as automotive.

* To reestablish the planting of street trees, replacing dying trees, and maintaining existing ones.

* To remove utility poles and put services underground where possible.

* To establish a lighting, signage, public information system that can be used throughout and identified with the area.

* To remove the high barbed wire fences in the area and replace them less obtrusive fences or use a different system of protection.

* To replace or repair all streets, curbs, and sidewalks that are in need.

* To utilize all established policies for the area that have been set by the North Meridian Corridor Development Plan.
traffic & parking

AMENITIES

* There is close convenient access directly to I-65 via 21st Street. 21st Street also provides east/west access to the city.

* Meridian Street and Illinois Street provide fast convenient access to and egress from the downtown area.

* On-street parking is available on Fall Creek Parkway, Meridian, and Illinois street.

* Off-street parking is available for all Meridian Street commercial businesses in the immediate area.

* Off-street parking lots will be provided for the new elderly housing units on the west side of Illinois.

* Bus routes are convenient: north from Meridian, south from Capital (2 blocks away), east and west from 16th street (6 blocks south).

LIABILITIES

* A large amount of non-local traffic use Meridian and Illinois during rush hour. In the evening Illinois Street is five lanes of one-way traffic which causes a tremendous barrier.

* On-street parking on Meridian, although prohibited during rush hour, causes congestion.

* Commercial and residential off-street parking is collected in large groups which emphasizes parking's visually negative impact.

* The parking needs for each individual business uses alot of land and causes a "missing teeth" streetscape.

* The Barth Electric parking area (2) and the Tutwiler Cadillac maintenance parking area (3) are grossly underutilized.

* Tutwiler Cadillac's two vacant buildings are surrounded by vacant parking (4) that is fenced in and is quickly approaching unusable conditions.

* The Mercedes-Benz maintenance area parks junked autos adjacent to the street (5), thus creating an eyesore to the Illinois Street pedestrian.

* Pierson Street is no longer used as a street because it was not established enough to act as a boundary to the Meridian fronting commercial businesses. It is now used as a service alley and has been completely closed in one section.
OBJECTIVES

* To minimize the visual effects of the existing parking area and the proposed areas through the use of landscape elements, changes in levels to adjust site lines, and to limit the size of parking concentrated in one area.

* To consolidate the present parking areas by utilizing the area more efficiently and establishing a system of entry and exits that will minimize circulation.

* To minimize the visual effects of parking while in the lot by introducing landscaping islands between the line of cars.

* To utilize on-street parking where it is available and does not cause congestion.

* To remove the excess parking areas on the site.

KEY
- PUBLIC PARKING
- PRIVATE COMMERCIAL (OFF-STREET)
- PRIVATE RESIDENTIAL (OFF-STREET)
- VACANT

> TRAFFIC DIRECTION
-.. TIME RESTRICTED ON-STREET PARKING
-.- ON STREET PARKING

North

0 70 150 230
**context**

**AMENITIES**

* The site is adjacent to the Meridian Highlands neighborhood which has a strong neighborhood image to draw from.

* The site is located within the North Meridian Corridor which has a plan to improve the image and economic position of the area.

* I.V. Tech, beauty shops, doctors, eye doctors, dry cleaners, and a great variety of restaurants and fast food establishments for use or employment opportunities are all within five minutes walking distance.

* Methodist Hospital, the Herron School of Art, and the Children’s Museum are all within 15-20 minutes walking distance.

* The Hoosier Dome, state and county governmental offices, IUPUI, and the main branch of the library are all within 15 minutes driving time and are on the bus routes.

* There is close access to I-65 and the major arteries of Indianapolis.

**LIABILITIES**

* There is a large amount of outside traffic because of the location on a major traffic spine.

* Major points of interest located north and south of the site cause people to drive through the area without stopping or even looking.

* The image of downtown Indianapolis stops where I-65 crosses Meridian Street.
zoning

The project area includes areas zoned D-R, C-1, C-2, C-4, & C-5.

D-R

* D-R are areas experiencing renewal with D-7 guidelines
  * Typical density: 20-60 units per gross acre
  * Floor area ratio: .60
  * Minimum frontage: 30 ft.
  * Minimum rear: 15 ft.
  * Minimum side: lesser of 20% of project width or 15 ft. but not less than 4 ft.
  * Maximum height: 35 ft.

C-1

* C-1 is office buffer district
  * Minimum frontage: 25 ft.
  * Minimum side: 8 ft. - 15 ft. to next residence
  * Minimum rear: 10 ft. - 15 ft. to next residence
  * Building height: 50 ft.

C-2

* C-2 is high intensity office apartment
  * Minimum frontage: 25 ft.
  * Minimum side: 8 ft. - 15 ft. to next residence
  * Minimum rear: 10 ft. - 15 ft. to next residence
  * Building height regulation, but subject to further setbacks if over 35 ft.

C-4

* C-4 is neighborhood commercial with C-1 uses permitted
  * Minimum frontage: 25 ft.
  * Minimum side: 6 ft. - 20 ft. to next residence
  * Minimum rear: 6 ft. - 20 ft. to next residence
  * Maximum building height: 35 ft.

C-5

* C-5 is general commercial district
  * C-1, C-1, & C-4 uses permitted with C-1 building regulations followed.

Because of the need for revitalization in this area the possibilities of re-zoning or variances on zoning are very strong.
existing site users

The area that will be affected by the project is presently being occupied with buildings belonging to the Mercedes-Benz dealership, Tutwiler Cadillac, two old homes, Barth Electric, six brick apartment buildings, a Plummer & Buchanan mortuary, a pawn shop, and two gas stations.

The Mercedes-Benz dealership consists of four separate buildings on the site, one of which is the maintenance building and specifically affects my site. Junked autos are stored around the maintenance building and are an eyesore. The Mercedes-Benz dealership is very strict on its intent not to move any of its present buildings. For this reason the Mercedes-Benz area will not be a part of the project site although recommendations for the screening of the area will be made.

Tutwiler Cadillac owns three buildings on the site. The two buildings directly affecting the project area are the old showroom and the maintenance area. The old showroom has been abandoned for years. It is a large building that has no significant architectural or historic purpose, so it will be removed from the site. The showroom that replaced the previously mentioned one fronts on Meridian Street and is now also been abandoned for a site further north on Meridian Street. There is an effort to try and use this building as a branch post office. The maintenance area consists of a large line of pre-engineered buildings set in a huge parking lot. The area is grossly under-used. The maintenance area will be relocated on a site closer to the present location of the showroom.

The houses that occupy the site are in very poor condition, one being abandoned and the other being a tavern. These houses will be used to fill in the vacant lots across from the project site on Illinois.
Barth Electric is an electrical contractor that doesn't have a retail outlet. They own the area to the north of their site as well as what they presently occupy. The area around the office building is used as parking for the employees, as well as, the semi-trailers that are not on job sites. Barth Electric has purchased the land surrounding them simply for the reason to control it. They realize they are not using the land efficiently. To free the area that they presently occupy, their office building will replace a gas station that is located on the corner of Meridian and 23rd Street in front of a group of buildings that are used for Barth's storage. Their parking needs will be analysed and an efficient parking arrangement will be provided adjacent to the storage buildings.

The six brick apartment buildings along Fall Creek are presently in very poor condition. Because of a plan to improve the area along the Fall Creek, these apartments will remain. They are an addition to the area's historic past and, after revitalization, will offer housing with a pleasant view to Fall Creek.

The mortuary is presently being given a "face lift." It is a registered historic building and was Planner & Buchanan's first mortuary. The mortuary will remain and parking will be redone more efficiently.

The pawn shop and the two gas stations, that are on the fire fronting on Meridians Street, are seen by the North Meridian Corridor Development plan as being visually disruptive to the streetscape. For this reason these elements will be relocated.
user identification

1) COMMUNITY POPULATION

* Indianapolis, In. Pop. 760,000
* Center Township Pop. 208,624
* Methodist Hospital Vicinity Pop. 12,242
* Projected Community Pop. App. 300

2) MAIN FACTORS OF PROPOSED COMMUNITY

A. Provide housing for all racial backgrounds, ages, income levels, and family sizes and construction.

B. To provide a community by creating definable community territories, i.e., gathering spots, recreational areas, and indoor areas. To provide the community with an image and give the residents an identity.

C. To integrate housing into the existing commercial fabric by dealing with parking, use, and traffic.

D. To provide each user with an outdoor area that they can somehow personalize.

R. To break down social stigmas created by social barriers by giving the community a common denominator. Most of the residents will be employed at Methodist Hospital. Also the prevalence of the single parent families promotes the use of a community space as a gathering point for children after school, where the community will supervise them until the parents pick them up.

F. To make the community a secure place to live by the use of good design and not through the use of oppressive barriers.

1) CATEGORIES OF USERS

A. Residents:
* preschool children
* school age children
* teenagers
* young single people
* young couples
* middle aged single people
* middle aged couples
* elderly couples
* young families of one or two parents
* middle aged families with one or two parents
* transients in the area
* transients in the area
* administrative personnel in charge of the community area's function

B. Commercial users
* employees
* delivery people
* customers from the community, neighboring communities, Meridian business people, people passing through from outside the area

4) USER PROFILES (RESIDENTS)

A. Age

Existing
* 15% under 15
* 20% over 65
* 40 years median age

Proposed
* The median age in the surrounding communities is high, therefore, the proposed community should try to bring in younger families to revitalize the area and give the community a younger solidifying base. There is a large amount of elderly people in the area and there is new housing exclusively for the elderly, therefore, a younger family should be integrated into the area to give a more even age and family mixture.

B. Family Structure

Existing
* 44% married couples
* 41% single women parents
* 12% single male parent
* 35.2% separated
* 25% of men 15 years & older are married
* 16% of women 15 years & older are married
* 3.2 is the average family size

Proposed
* Because of the large number of single parent families special attention should be made to provide
areas for their children to be after school while the parents are at work. Community areas will also provide for interaction between parents that are in the same situation and experience the same problems.

C. Ethnic Background
Existing
* 60% Black
* 40% white
* There are German, Irish, and English backgrounds that are present with all speaking English as a primary language. Less than 1% are first generation immigrants.
Proposed
* The percentages of ethnic backgrounds should match that of the entire area so the community is not dominated by a single ethnic group.

D. Education (statistics are for 25 years and older)
Existing
* 30.9% grade school or less
* 40.6% have high school diploma
* 14.3% one or more years of college
* 6.6% four or more years of college
* 8.8% of people between 16 & 19 are dropouts
Proposed
* The education level of the area should try to be raised to at least a majority with a high school education.

E. Skills And Abilities
Existing
* The range of the skill level is very high. It ranges from hospital personnel, manufacturing, and clerical to self-employed.
Proposed
* A wide range of skills should be maintained in the community

F. Occupation
Existing
* 14% unemployment rate
* 48% of working age men are working
* 40% of working age women are working
* 45% work in service operations
* 20% work in administrative areas
* 25% work in a professional specialty
Stats for industrial class
* 60% are professional
* 25% are in manufacturing
* 15% are in retail trade

Proposed
* Residents should have a wide range of occupations to obtain a typical cross section of people

G. Income
Existing
* median income is $7,134.00
* 52.2% make below $7,500.00
* 4.6% make above $25,000.00
Proposed
* median income level should be raised to $15,000.00

H. Residential Status
Existing
* 31.6% lived in the same place for more than 10 years
* 98% have lived in the same place for at least 15 months
Proposed
* A high turnover rate should be avoided. Extra features in the units should be added so that families will remain in the community to give it stability.

5) ANTICIPATED USER NEEDS PRIORITIES

A. Housing
* Suitable living conditions, including all the normal necessities of a home for all the users.

B. Community Area
* day care center and nursery
* facilities for teenagers to spend leisure time, participate in organizations, and use for entertainment
* areas for the elderly to gather and socialize as well as the adults in the community
* group activity and meeting areas
* an auditorium where dramatical and musical performances can take place, as well as, roller skating, indoor carnivals, etc...

C. Exterior Community Areas
* grass and paved areas for play and relaxation
* sitting areas with covered tables
* paved space for sports
* open areas to throw a ball, frisbee,
D. Commercial Areas
- eating areas both indoors and outdoors
- parking areas for both the employees and the customers
- adequate entrances and exits from the property

6) GOALS AND OBJECTIVES
A. Residents
* provide spaces to interact (community) with recreational and social gatherings such as neighborhood parties and neighborhood association meetings
* provide the family or small group with areas that can interact in (territory)
* the individual must be provided with an area that they can call their own (personal space)
* allow the residents to individualize their personal, family, and community space
* areas where individual groups can gather and have their own space without providing barriers that would segregate the groups

B. Community
* to provide an image that is inviting to people from outside the community
* as well as integrating it into the proposed community
* to give all ages of family members a place that they can go that they consider their own space
* to provide areas where all of the different age groups and ethnic groups can interact

C. Commercial
* provide easy access to the delivery personnel and to the customers
* supply adequate parking
* screen some of the undesirable areas from the residential area
* convey an image that is compatible with the neighborhood while maintaining commercial images and commercial draw
* provide them with adequate safety

D. Visitors (passers through)
* give the opportunity and encourage people from outside the immediate community to interact
* provide a safe image and safe access to the community
* give an inviting image while maintaining territory
* personal territory should be readily recognized so that it will be respected
<table>
<thead>
<tr>
<th>Program Elements</th>
<th>Users</th>
<th>Characteristics Of Users</th>
<th>Special Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSERY/DAY CARE CENTER</td>
<td>PRESCHOOL CHILDREN</td>
<td>* need for nursery and babysitter because of working parents</td>
<td>* should provide a sense of adventure and places to explore while maintaining safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* learn by playing</td>
<td>* there should be large open areas for group learning and play along with small</td>
</tr>
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<td></td>
<td></td>
<td>* full of energy, like to explore, easily wander off</td>
<td>isolated areas for individual activities</td>
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<td></td>
<td></td>
<td>* need constant supervision and care</td>
<td>* a nursery with proper equipment to take care of small children and possibly</td>
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<td></td>
<td></td>
<td>* need to somehow be kept busy and entertained</td>
<td>infants is needed</td>
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<td></td>
<td>TEACHERS AND</td>
<td>* there should be at least two people working in the nursery</td>
<td>* an area for quiet activities such as napping is needed</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td></td>
<td>* there will need to be three to four people working in the day care area</td>
<td>* there should be some form of distinction between the play and instruction areas</td>
</tr>
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<td></td>
<td></td>
<td>* an administrative person will be needed</td>
<td>* moveable equipment and partitions could be employed to provide flexibility for</td>
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<td></td>
<td>* there should be an area where the workers can be away from the children for short</td>
<td>multiple uses</td>
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<td></td>
<td></td>
<td>periods of time</td>
<td>* indoor and outdoor play areas should be adjacent so they can be connected and used</td>
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<td></td>
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<td>* the workers could be people from the neighborhood or volunteers</td>
<td>as a single area</td>
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<td></td>
<td>* teaching areas should have views to the exterior</td>
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<td></td>
<td>* exterior play should be away from the nursery</td>
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<td></td>
<td>* the exterior play area should incorporate normal playground equipment, as well</td>
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<td>as open surfaced areas and open grass areas, a vertical surface should also be</td>
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<td>supplied</td>
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<td>* a drop off area that will allow children to enter the building without crossing</td>
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<td>traffic is needed</td>
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<td></td>
<td>* there should be an office where administrative tasks can take place and workers</td>
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<td></td>
<td></td>
<td>can escape from the children</td>
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<td></td>
<td></td>
<td>* storage area is needed for supplies and play equipment</td>
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<td></td>
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<td></td>
<td>* a small kitchen is needed for supplying lunch, snacks, and some possible</td>
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<td></td>
<td>instruction for small children</td>
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<td></td>
<td>* bathroom facilities are required that will serve the workers and the children</td>
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<td>* there should be areas that are separated totally from the main spaces for children</td>
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<td></td>
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<td></td>
<td>to be talked to or disciplined without embarrassing them in front of others</td>
</tr>
</tbody>
</table>

* ambient conditions are improved by a normal range of light as much as possible. The learning and play area should be able to be darkened at times and in the nursery. * there needs to be a separation between the nursery, the nursery, and the children kept away from excess noise.
<table>
<thead>
<tr>
<th>Ambient Conditions</th>
<th>Estimated Size</th>
<th>Generic Form &amp; Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>* thermal conditions should be kept within a normal range - special care should be taken to keep drafts away from the nursery areas.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* lighting should incorporate natural light as much as possible especially in the learning and play areas, lighting should be able to be lowered during nap times and in the nursery.*</td>
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</tr>
<tr>
<td>* there needs to be a definite acoustical separation between the active areas and the nursery, the nursery should also be kept away from excessive exterior noise.*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Nursery- 900sf. Instruction- 1750sf.  
Play- 1750sf.  
Isolation- 200sf.  
Bedrooms- 200sf.  
Kitchen- 350sf.  
Office- 200sf.  
Storage- 450sf. |

* ambient conditions should be normal  
* there should be acoustic separation for the private rooms and the office.  

---

Graphics from:  
Time-Saver Standards, 1st. ed.,  
Piacentini, John, Housing, 2nd ed.,  
John Wiley & Sons, New York, New York, 1982
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<th>Users</th>
<th>Characteristics Of Users</th>
<th>Special Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL AGE CHILDREN</td>
<td>* these children are at school most of the day but need a place to go between the time they get home and their working parents get home. They feel more independent and need to be treated with some respect and be given some liberties. * they like to negotiate themselves and do things on their own. * should be encouraged to interact with other age groups and to use their imaginations. * some will use this time to do their homework.</td>
<td>* need places where groups can gather and separate themselves from the preschool areas if they want. * an area that can be used for homework. * the use of partitions that the children can manipulate to their immediate needs could be supplied.</td>
<td></td>
</tr>
<tr>
<td>TEEN CENTER</td>
<td>TEENAGERS</td>
<td>* they listen to music, watch T.V., play computer games and like to have lengthy &quot;bull sessions&quot;. * they believe they are adults and need to be able to be independent of other age groups. * they like to have a place that is considered solely their own. * they like to do different as well as follow every trend that comes along. * they need a place to go after school and in the evenings to socialize. * they start forming couples and have dates even though they can't drive.</td>
<td>* there needs to be a combination of spaces, large and small so that many different activities with different sized groups can take place. * a large central space can be used as a lobby, as well as, a place for large gatherings, parties etc... * activities should be incorporated into the spaces so that it becomes a possible place to take a date. * small rooms can be used as meeting areas for organizations, as well as, recreational activities like ping-pong or billiards. * furniture and partitions should be totally moveable so that the user can manipulate spaces to their needs. * a finish on walls could be used that would allow the decorations of spaces to be done by the teenagers themselves.</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>* there should be a full time administrator to take care of the functions of the building. * an activities person should also be available to plan and coordinate the meetings of groups and to organize special functions. * a person that has training with dealing with teenage problems should be on hand so that if there is a problem that a teenager can not discuss at home there will be a trained unbiased person to help them this person can be the same as the activities director.</td>
<td>* there will need to be an office that will be used by the administrative personnel. * a private area that is located away from the major activity areas will be needed for private talks with the teenagers. * a storage area to keep equipment and supplies for the building is needed, it should be located next to the office so that materials can be distributed by the administrator. * there should be a small kitchen that can be used for functions in the center, this can also incorporate vending machines.</td>
<td></td>
</tr>
</tbody>
</table>

* the open common area rooms should be able to be acoustically separated. * when parties are functions that use, there should be a way up to function as an area with natural light should be possible especially if lighting should be throughout the building. special functions need to be handled on an approach. * normal thermal control must be maintained.
<table>
<thead>
<tr>
<th>Ambient Conditions</th>
<th>Estimated Size</th>
<th>Generic Form &amp; Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Open Lobby- 1900sf.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meeting Rooms- 500sf.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storage- 200sf.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Office- 200sf.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Restrooms- 225sf.</td>
</tr>
</tbody>
</table>

- The open common area and the meeting rooms should be able to be kept acoustically separate when needed.
- When parties are taking place or functions that use the entire building, there should be a way to open the building up to function as a single unit.
- Natural light should be used as much as possible especially in the main lobby area.
- Lighting should be able to be controlled throughout the building so that during special functions the lighting can be adjusted to an appropriate level.
- Normal thermal conditions should be maintained.

- The administrative office should be able to be acoustically separate from the main activity areas.
- It is very important that the office space for private talks be able to be acoustically separate from the other areas.

![Separation that allows some interaction](image)

- School age children have areas to gather or study.
<table>
<thead>
<tr>
<th>Program Elements</th>
<th>Users</th>
<th>Characteristics Of Users</th>
<th>Special Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Center</td>
<td>Adults of all ages</td>
<td>* This building will function mostly as an area for the elderly during the day but will also serve all ages of adults. * The elderly like to be around people that share their own interests, problems, and life styles, but they also enjoy being around younger people to share their wisdom. * The elderly are not able to move quickly, walk long distances, or negotiate stairs and other level changes. * The building can be used by other adults as a meeting area for organizations and for neighborhood gatherings. * They like to have a place where they can be away from their children but still be able to get to them quickly. * The spaces can be rented out for private parties or receptions.</td>
<td>* There needs to be a large gathering space where everyone can congregate and socialize. * There should be care taken to make the building accessible to the handicapped and elderly, through the use of elevators, a car drop off, and the elimination of level changes. * There should be small rooms that can be used for meetings and as rooms for organized crafts for the residents and the elderly. * Rooms for recreation should also be supplied. * The main gathering spaces should have a direct view to the exterior activity areas so that elderly people that are restricted can still feel in touch with the outside. * The large open gathering spaces should be able to be manipulated so that the space can be adjusted for different functions. * Spaces and activities should encourage activity and interaction for the elderly not laziness and complacency.</td>
</tr>
<tr>
<td>Common Exterior Space</td>
<td>Children and teens</td>
<td>* They really enjoy being outdoors to talk and listen to music. * They play basketball, volleyball, frisbee, hackyack, etc. * Smaller children jump rope and play with balls. * They ride bikes. * Small social groups form and like to be separate so they can gossip about each other. * They like to have organized parties outside.</td>
<td>* There should be a basketball court that can be used at any time, it can also be used for volleyball also. * A hard surfaced area to play on is needed as well as an open grassy area that can be played or sat on. * There should be tables and chairs that can be moved around at will to suit changing needs. * Equipment should be able to be checked out of a storage area for use. * There should be a separation between the activity areas and any traffic, barriers should also be used so that balls etc... don't get out into traffic. * There should be an area that can be used for parties that can be adjacent to interior areas.</td>
</tr>
</tbody>
</table>
## Appropriate Conditions

Special thermal conditions should be taken into account because the elderly are prone to sickness from drafts etc.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Open Lobby- 1800sf.</td>
<td>-</td>
</tr>
<tr>
<td>Meeting Rooms- 500sf.</td>
<td>-</td>
</tr>
<tr>
<td>Storage- 200sf.</td>
<td>-</td>
</tr>
<tr>
<td>Kitchen/vending- 300sf.</td>
<td>-</td>
</tr>
<tr>
<td>Office- 200sf.</td>
<td>-</td>
</tr>
<tr>
<td>Private Room- 200sf.</td>
<td>-</td>
</tr>
<tr>
<td>Restrooms- 225sf.</td>
<td>-</td>
</tr>
</tbody>
</table>

### Basketball Court

- It can also be an exterior space.
- There needs to be a separation between interior spaces and quiet spaces.
- The area should be well lit, especially at night.

### Environmental Concerns

- There should be some way that equipment can be used outside either by a permanent speaker system or by providing a side hook-up.

![Diagram](image-url)
<table>
<thead>
<tr>
<th>Program Elements</th>
<th>Users</th>
<th>Characteristics Of Users</th>
<th>Spacial Requirements</th>
</tr>
</thead>
</table>
| Fitness Center   | Adults and Elderly | * adults like a place to sit and socialize outside while watching their children play  
* they like to play basketball etc., with their own age group and with their children  
* the elderly like to be in contact with the younger people in the community  
* they like to sit outside and play board games, cards, and physical activities if they are able  
* they enjoy being in landscaped areas but are often unable to maneuver on grass | * in addition to the spaces already mentioned in the children and teen section there should also be a landscaped area that is accessible to the elderly through paving paths and seating areas  
* there should be close contact between the areas that are used by the elderly to socialize and the play areas so there is supervision and interaction among different age groups  
* there should be a variety of spaces to break up the monotony of life |
|                  | All age groups from the immediate neighborhood and adjacent areas  
Business People That Work Along Meridian Street | * all age groups will be able to use the facility during the day and evening  
* business people along meridian can use in during lunch or after work  
* the building will be used as a fitness center and as a place for first aid classes, safety classes and other service oriented activities  
* both men and women will use the facilities for routine planned activities or for just working out sometime  
* the facility will be used by organized groups for training, meetings and for competition in the community and between communities | * two handball courts should be provided, they should have glass walls at the back so that viewing may take place, possibly from the sidewalk  
* a large exercise room that will be furnished with weight training equipment and also a large open area that can be used for individual exercise and for aerobics  
* a gym that has a full basketball court should be provided that can be used for volleyball and other activities also, a small amount of moveable bleachers should be included for spectators  
* locker rooms for men and women should be provided that are easy to locate from the front entry and are in close proximity to the exercise and gym area, bathroom facilities that are able to be entered without going through the locker area will eliminate the need for another set of facilities  
* rooms that are separate from the other activity areas should be provided that can be used as craft instruction rooms, private exercise rooms, meeting rooms and also can be used for classes dealing with health care and physical fitness  
* a small kitchen area that can be used from the meeting rooms is needed for preparation of food and for use in craft classes  
* an entry lobby is needed that has views to the street and sitting areas so that people can wait to be picked up at the door, the lobby should also include a vending area |
### Ambient Conditions

<table>
<thead>
<tr>
<th>Estimated Size</th>
<th>Generic Form &amp; Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gym- 6000sf.</td>
<td>Handball- 800sf.</td>
</tr>
<tr>
<td>Exercise- 1200sf.</td>
<td>Lockers- 800sf.</td>
</tr>
<tr>
<td>Offices- 200sf.</td>
<td>Storage- 500sf.</td>
</tr>
</tbody>
</table>

- The offices and the storage areas should have normal ambient conditions.
- The meeting rooms should have the capacity for added ventilation because of the fumes that crafts can cause, if the meeting rooms are used for any activity.
- Extra cooling capacity may be needed to remove the heat build-up.
- Natural light should be used as much as possible in the meeting rooms especially for craft classes that require natural light.
- The gym will need a special HVAC system to handle the varying loads that happen with no activity in the gym and the sudden activity and cheering spectators. Natural light can be used in the gym but windows must be protected from damage by balls. The lighting must be kept constant during events and should be even and not cast shadows. There should be acoustical barriers between the gym and other spaces, because of the hard materials the noise level is very high and should not be transmitted to other areas.
- The handball court has the same needs as the gym.
- The exercise room must have added cooling and ventilation because of the excessive activity during exercise times. Music is used in aerobics classes so this area should be screened acoustically from the other areas. Lighting should be kept at normal levels.
- The locker rooms will need extra cooling and ventilation capacity because of the heat and humidity build up of the lockers. Lighting and acoustics should be kept at normal levels for a bathroom.
<table>
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<th>Program Elements</th>
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<th>Special Requirements</th>
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</table>
| ADMINISTRATION   |       | * instructors of classes in crafts, fitness, and sports will need a place to organize and schedule events  
* an administrator that will be in charge of the entire building is needed  
* there should be a person in charge of equipment and the maintenance of the areas also | * a general office for the administrator should be located in a central position and close to the lobby, it should include an information desk and a private office for the administrator  
* an office that is located in the gym area is needed as an area for instructors to use and for equipment to be checked out  
* storage for the equipment and for maintenance items is needed that is adjacent to the gym office  
* there should be an entrance to the storage area that can be used as a loading area | |
| AUDITORIUM      |       | * the stage will be used as a place for dramatic, choral, and musical performances, it will also be used for presentations, meetings, etc...  
* performers will practice on stage and off stage  
* they make their own sets and props  
* they store equipment, costumes, and sets from past performances  
* the performers put make-up on, get dressed, and warm up before a performance | * a stage that has enough height to handle drops for plays and concerts and a movie screen  
* there must be enough side stage area to move props on and off during performances  
* there must be an area for the rope mechanism for the drops that does not interfere with the stage flow but has visual access to the stage  
* an outdoor stage that is located at the back of the inside stage can be opened with large doors and be able to use the lights and drops of the interior stage  
* there should be a workshop area where props etc... can be made  
* a storage area for props and costumes is needed, storage can take place under the stage if a lift and stairs are provided  
* there should be men's and women's dressing rooms and each should be furnished with a half bath, they should have direct access to the stage area  
* two rooms will be needed as practice and warm up rooms  
* an office to serve the stage manager and the coordinator of activities is needed in the backstage area and is close to the stage | |
| STAGE AND BACKSTAGE AREA | PERFORMERS  
STAGE WORKERS  
ADMINISTRATION |       | |
| 47               |       | |

**Ambient Conditions**

- Lighting in the office should be kept at normal levels, however, be able to be dimmed so that it does not interfere with the normal practices for performance area, they be able to be used for extra ventilation for the stage area but the heat produced by the acoustics should be professional skilled acoustics performance must be distinctly, it is possible to direct sound the performance area acoustically separate areas and the outside Practice rooms show acoustics, practice walls and acoustical treatments
### Ambient Conditions

<table>
<thead>
<tr>
<th>Estimated Size</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Stage - 1000sf.</td>
<td>Working and Storage Space</td>
</tr>
<tr>
<td>Work Room - 400sf.</td>
<td>Scenery Space</td>
</tr>
<tr>
<td>Office - 140sf.</td>
<td>Acting Space</td>
</tr>
<tr>
<td>Dressing Room - 300sf.</td>
<td>Scenery Storage</td>
</tr>
<tr>
<td>Practice Room - 350sf.</td>
<td>Audience</td>
</tr>
</tbody>
</table>

- Lighting in the off stage areas should be kept at normal levels if it should, however, be able to be lowered or screened so that it does not disturb performances.
- Lighting for the stage should adhere to normal practices for lighting a performance area, the lighting should also be able to be used on the outdoor stage.
- Extra ventilation and cooling are needed for the stage area because of the heat produced by the lighting.
- Acoustics should be worked out by a professional skilled at acoustics, performances must be heard clear and distinctly. It is possible to use movable shells to direct sound.
- The performance area should be acoustically separate from the surrounding areas and the outside street.
- Practice rooms should have good acoustics, practices such as non-parallel walls and acoustical materials should be employed.

The stage manager and activities are needed in close to the gym, and for instructors to be checked out for a test and for fun and that is very close to the pool as a loading area.

The height to handle arts and a movie stage area to viewing performances or the rope that does not flow but has stage is located at the top can be opened to use the interior stage shop areas where props and costumes is in place under the area are provided and women's should be bath, they should be stage area needed as practice and the stage manager and activities is needed in close to the
<table>
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</table>
| AUDIENCE SPACES  | PEOPLE ATTENDING MEETINGS, ENTERTAINMENT, AND DISPLAYS | * businesses can use the space for meetings, displays, entertainment etc...  
* schools can also use the space for these activities  
* there will need to be a place to sit and socialize before, during, and after performances  
* there can be roller skating, craft exhibits, carnivals, etc...  
* used by all age groups | * when the auditorium is used for stage performances, movies, and meetings there will need to be arranged seating  
* the seating will have to be able to be removed and stored when there are displays, roller skating, etc...  
* dropped screens or movable partitions should be available to subdivide the space to accommodate more than one use at a time |
| LOBBY AND SUPPORT AREAS | ALL USERS | * the lobby will be used before and after performances for people to socialize, go to the restroom, and to smoke  
* small groups will form and talk  
* the lobby will also be used as a reception area  
* tickets for events will be sold in the lobby  
* the lobby will be used as a display area for local artists, organizations, and possibly the nursery/day care center | * the lobby should have seating areas that are aranged in seating groups  
* there should be places to display art possibly using movable partitions as display surfaces  
* a box office should be located inside the lobby and should be visible from the main entry  
* restrooms should be located off of the lobby, doors entering directly into the lobby should be avoided  
* the lobby should have at least two different entries into the auditorium  
* the backstage area should be accessible from the lobby  
* an exterior space that can be used as an extension of the interior lobby should be located away from the heavily travelled areas of the site  
* the lobby should be served by a kitchen that food can be delivered at and prepared for receptions |

**Ambient Conditions**

* normal HVAC system except in the kitchen and ventilation will be acoustically separated from the main building  
* lighting must be flexible, very low during performance, bright during meetings  
* lighting in the lobby and flexibile, very low during performances  
* Nature light is essential, natural light must be a way to subdivide the space
Ambient Conditions

Normal HVAC systems should be used acoustically, the space should be kept separate from the outside and because of a probable hard-surfaced floor, the wall and ceiling material should be sound absorbant. Lighting in the space should be very flexible, very low lighting will be needed during performances, high lighting will be used during meetings so everyone can be seen, natural light can be used but there must be a way to screen this light during performances.

HVAC should be kept at normal levels except in the kitchen where extra cooling and ventilation will be needed. Lighting must be very flexible, level must be able to be changed during performances and receptions, because of the display use of the space there will also need to be adjustable direction lighting. The lobby should be able to be kept acoustically separate from the auditorium and the kitchen should also be kept acoustically separate from all other spaces.

<table>
<thead>
<tr>
<th>Estimated Size</th>
<th>Generic Form &amp; Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditorium- 3500sf.</td>
<td><img src="image.jpg" alt="Diagram" /></td>
</tr>
<tr>
<td>Lobby/Exhibition- 2500sf.</td>
<td><img src="image.jpg" alt="Diagram" /></td>
</tr>
<tr>
<td>Ticket Office- 800sf.</td>
<td><img src="image.jpg" alt="Diagram" /></td>
</tr>
<tr>
<td>Kitchen- 550sf.</td>
<td><img src="image.jpg" alt="Diagram" /></td>
</tr>
<tr>
<td>Restrooms- 350sf.</td>
<td><img src="image.jpg" alt="Diagram" /></td>
</tr>
<tr>
<td>Program Elements</td>
<td>Users</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------</td>
</tr>
</tbody>
</table>
| COMMERCIAL AREA  | USERS OF ALL AGES FROM THE NEIGHBORHOOD, MERIDIAN BUSINESSES, AND PEOPLE IN TRANSIT | * children and teens will go there after school and in the evening to socialize and eat a snack  
* neighbors and Meridian business people will gather for lunch and dinner in the food shops  
* teenagers that can not drive can go here for dates, possibly a stop off before going to the auditorium | * the commercial area should have a distinct and unique image that will be a pleasant alternative to the fast-food establishments  
* indoor and outdoor dining will be located away from the traffic areas on the site, the outdoor dining can be partially covered and climatically controlled like a greenhouse dining area or food court that serves all of the different stores  
* a market study of the Methodist Hospital vicinity showed that the residents saw a need for a bakery, a deli, a small grocery store, a drug store, and clothing shops  
* there are already clothing and footwear shops in the vicinity that could be improved to satisfy this need  
* a store that would serve as a small grocery store much like a convenience store could be established that could also have a pharmacy included  
* a deli serving the area would be a place to buy meats and also serve as an alternative to the fast-food chains along Meridian, for lunch and dinner  
* a bakery that sold conventional pastries and special pastries would be a drawing point for the area, it could also serve pastry lunch items  
* a restaurant that had a more formal atmosphere should be included as a draw for business lunches and also as a nice close place for neighborhood residents to eat and for teenagers that can not drive to take a date |
| HOUSING          | PRESCHOOL CHILDREN       | * like to play all day  
* need constant care and supervision  
* like to explore and get into things  
* need things to play with  
* need changed  
* need entertained  
* take naps | * area of play needs to be close to where parent spends most of their time  
* place to store toys  
* a specified play area that will discourage wandering off  
* an area that they can identify as their own  
* a constant sleeping and play area so that a routine is set up  
* the areas used as play areas can be the same as, or sections of, the family area so that there is constant supervision  
* some movable barriers to prevent wandering off that aren't "prison like" |
<table>
<thead>
<tr>
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<th>Estimated Size</th>
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</thead>
</table>
| the commercial areas should have normal conditions maintained. | Commercial Stores- 1000-2000sf. | |%
| special care should be given the greenhouse area to control its thermal gain in the summer and winter. | Greenhouse- 20% of Commercial Space | |
| the lighting should make the area bright and inviting. | | |
| lighting in the restaurant and possibly the greenhouse should be able to be turned on so that a more formal lighting can be obtained in the evening if desired. | | |

![Diagram](attachment:image.png)
<table>
<thead>
<tr>
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<th>Users</th>
<th>Characteristics Of Users</th>
<th>Spatial Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL AGE</td>
<td></td>
<td>* likes to play but does not need as much supervision and can create their own games</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* want to be alone at times</td>
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<tr>
<td></td>
<td></td>
<td>* watch TV and listen to music</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* need to study or do homework</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>* possibly come home to an empty house because parents work</td>
<td></td>
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<tr>
<td></td>
<td>TEENAGERS</td>
<td>* need to have their own space and be able to personalize it</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>* they need a highly personal space</td>
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<tr>
<td></td>
<td></td>
<td>* they need a quiet study space</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>* they need a private area to converse with friends</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* listen to the stereo and watch TV</td>
<td></td>
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<tr>
<td></td>
<td>SINGLE ADULTS, COUPLES</td>
<td>* not concerned with children's needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* spend more time entertaining</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* have more hobbies or extra activities because of less of a commitment due to lack of children</td>
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<td></td>
<td></td>
<td>* house is empty all day</td>
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<tr>
<td></td>
<td></td>
<td>* more leisure time</td>
<td></td>
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<td></td>
<td></td>
<td>* need a place to be alone at times</td>
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<td></td>
<td></td>
<td>* may be a little noisier at times</td>
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<tr>
<td></td>
<td></td>
<td>* need a place to play alone or with one or two friends</td>
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<td></td>
<td></td>
<td>* a small personal space like a single bedroom or part of a bedroom that is exclusively theirs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* objects such as desks, chairs, and partitions, that can be used to manipulate their area</td>
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<td></td>
<td></td>
<td>* a space that provides a relaxing &quot;laid back&quot; atmosphere that they can personalize to their specific taste</td>
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<tr>
<td></td>
<td></td>
<td>* separate from other family members, especially younger siblings, and separate from highly trafficked areas</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>* the personal teenage space needs to be larger and more flexible than the school age space</td>
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<tr>
<td></td>
<td></td>
<td>* large enough to hold two or three people</td>
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<tr>
<td></td>
<td></td>
<td>* these areas could be offshoots of the bedrooms like dormers that would give a great sense of enclosure</td>
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<tr>
<td></td>
<td></td>
<td>* smaller more intimate area is needed</td>
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<tr>
<td></td>
<td></td>
<td>* less storage space</td>
<td></td>
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<td></td>
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<td>* study or quiet reading space can be integrated into the major living area</td>
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<td></td>
<td></td>
<td>* living space adequate for entertainment</td>
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<td></td>
<td></td>
<td>* highly personalized</td>
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<td></td>
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<td>* a little more recreation/entertainment space</td>
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<td>* small spaces off of main area for personal work spaces</td>
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<td></td>
<td></td>
<td>* a strong open connection between rooms</td>
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<td></td>
<td></td>
<td>* built in bar</td>
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<td></td>
<td>* an open plan connecting the rooms (dining, living, and kitchen can come together to form one room)</td>
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<td></td>
<td></td>
<td>* a bar can serve as a partial separation between the spaces</td>
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<tr>
<td>Ambient Conditions</td>
<td>Estimated Size</td>
<td>Generic Form &amp; Examples</td>
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<tr>
<td>Relaxing, laid back, personalized</td>
<td>The room sizes of the units will vary with family size.</td>
<td><img src="image" alt="Diagram of generic house forms" /></td>
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<td>or with one or two members, separate needs to be met</td>
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<td><img src="image" alt="Diagram of generic house forms" /></td>
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<td>or with three people or more, the school would give a</td>
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<td>is needed</td>
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<td>Space can be living area with entertainment area for between rooms</td>
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<tr>
<td>the rooms can come with a separation</td>
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<td><img src="image" alt="Diagram of generic house forms" /></td>
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</tbody>
</table>