"What is quality housing?" was the central question in this study. We sought its answer in Twin Cities neighborhood, city and metropolitan programs; local housing projects; published literature on housing and neighborhood design; and the Design Center's own research on housing and neighborhoods.

What we found was a consistent set of goals, scales, design elements, and issues which are critical in the making of quality housing. These shared characteristics, applicable to medium-density housing and single family homes, help insure that “housing units” can become homes which sustain residents’ lives, community identity and economic value.

All of the successful examples we examined achieved four broad goals. These projects, each in their own way:

- foster a sense of ownership, security and belonging consistent with familiar, predictable patterns of use;
- respond to the life-cycle housing needs of a diverse and changing community;
- compliment and contribute to the surrounding neighborhood character and image;
- help build toward a shared future vision of their community through sensitive planning and design.

These goals are achieved through careful attention to physical elements and quality of life issues at three scales: the house and yard; the residential block; and the neighborhood.
Lessons of the Single Family House

The traditional single family house in the Twin Cities contains several elements that help make it a comfortable, safe and interesting place to live. The scale and massing of the house in relationship to its neighbors, and the level of detail and type of material used contribute to the overall residential image of the neighborhood. The property lines of the single family house and yard clearly define its territory. The placement of the house within that territory establishes a public front (between the house and the street) and a private back (between the house and alley or rear property line). Physical cues like sidewalks, fences, vegetation and porches help define the transition from public to private, clearly indicating where visitors are welcome and which areas are intended for residents. The placement and orientation of the house also allows residents to view activity on the street.

Benefits of the Block

The block, formed by several lots side by side, builds on the successful elements of the single family house and yard. Echoing the spatial layout of the house and yard, spaces on the block become increasingly private as they move away from the outer public edge at the street, towards the private back yards at the block’s core. This public to private hierarchy of space provides cues to visitors about how to act and where to be. Visitors understand they are to use sidewalks rather than cut through yards. Safety also increases as more neighbors along the length of the block survey the same street and yard space.
Program

The program is a document that describes the specific needs and objectives of a proposed housing project and its residents. A preliminary program can be based on the previous projects, experiences or analyses of an architect, housing developer, funder or community group.

Program objectives can help clarify desirable housing sites in the neighborhood location and begin to evaluate whether the housing type will meet the objectives of the neighborhood community.

Questions to ask include:

- What is the general proposed building type (e.g. duplex, four-plex, townhome, apartment building, or mixed-use type)?
- How many buildings are proposed? How many units are there per building?
- How many bedrooms are there per unit? What is the range of overall unit sizes?
- What other indoor or outdoor activity areas will be provided (laundry areas, play areas for children, management offices, storage space)?
- What are the household types the project might accommodate (single people, roommates, single parents, families with children)?
- Do the proposed residents have unique requirements which might influence project design, development and site selection (shared kitchen facilities for students or group living, child care space for single parents, special needs for residents who are elderly, disabled or of a unique ethnic background)?
- What are the parking needs of residents and visitors? Check local zoning codes.

In addition to providing the answers to the above questions, the program may also include the following preliminary information which can influence site evaluation and development.

- What is the ownership structure of the residential units (e.g. rent, own, leasehold cooperative or condominium)?
- What management and maintenance services will be provided for residents, and what will residents be responsible for?
- What is the anticipated budget for the project?
Physical features of the site include buildings and outdoor spaces on the site and the connections to other destinations. While variations exist from site to site in building type, size, amenities and services, the four features included here can be found in any housing community. The four main physical features of the housing site are:

**The Private Domain**
“What is Mine” — the individual dwelling unit and adjacent outdoor space.

**Shared Outdoor Space**
“What is Ours” — areas used by several households on the site but not by the entire neighborhood.

**Pedestrian Walkways**
“Where We Walk” — public sidewalks at the edge of the site, shared sidewalks that connect destinations within the site and sidewalks leading to individual units.

**Cars and Parking**
“Where Our Cars Belong” — streets, parking lots or garages that accommodate resident and visitor vehicles.
Overlaying the physical features are quality of life issues, critical to how people feel about where they live and how residents and visitors behave on the site. Both the Design Center’s own research and that of other published work consistently raises these issues as being essential to producing quality housing.

**Ownership**

Defining territory by marking edges with physical cues, by naming activities for each space, and by orienting buildings and spaces.

**Use**

Supporting the needs and activities of residents in a clear, familiar manner through the physical design of the site.

**Security**

Controlling access to nonpublic areas (the Private Domain and Shared Outdoor Space) and providing opportunities for informal surveillance of the site and adjacent public space.

**Image**

Contributing to a positive residential image of the community for the residents and the neighborhood through building location, massing, scale, materials and maintenance.
The guidelines that follow are formed by the interface between the physical features and quality of life issues. They suggest specific qualities to aim for, and pitfalls to avoid, in shaping the quality housing site. The matrix above provides a visual outline of how features and issues relate to form guidelines for site development. Each dot on the matrix represents the set of guidelines that grows out of the interface between a single feature and issue. For example, a set of guidelines addresses the issue of ownership related to the private domain. Keeping the picture of the matrix outline in mind during the site development process will help assure you that the basic, critical relationships on the site are considered.
The private domain consists of the interior dwelling unit and adjacent outdoor spaces that are immediately accessible from within the unit, such as a yard, balcony, patio or porch. These adjacent outdoor spaces act as extensions of the home.

Ownership

- **Distinguish between the “front” and “back” of the private domain.** The front faces the public street, while the back relates to the private territory and shared spaces behind. The orientation of the buildings establishes gradations of public and private areas surrounding the home and helps residents and visitors understand who controls each space and who belongs there.

- **Include some private or semiprivate outdoor space for each home,** such as a defined yard, patio, porch, or balcony that provides households the opportunity to personalize the space with gardens, outdoor furniture, potted plants, etc.

- **When possible, provide these private outdoor spaces at ground level, with direct access from each home.** An on-grade outdoor space provides opportunities for socializing with neighbors passing by, and provides small children with a place to play near home.

- **Clearly define the boundaries of private outdoor areas.** Use physical cues such as vegetation, changes in grade, sidewalks and fencing to define the boundaries of private outdoor spaces. These elements mark the edges of private domains and provide a gradual transition between private homes and public or shared areas.
Use

- Provide a front entry for each unit that is clearly visible and accessible from an adjacent, controlled public path. "Fronts" are the homes' public faces, where visitors enter and where we display plants and other personal items to share with the neighborhood. Visitors, postal carriers, police, and emergency vehicles should be able to easily locate and approach this door.

- Provide access via the back door to private outdoor spaces and/or resident parking. "Backs" are more private and traditionally more informal than fronts; they are where residents might store outdoor equipment, garden, barbecue, hang laundry, and where small children play.

- Design private and semiprivate outdoor spaces keeping solar orientation in mind. Ensure that each household's outdoor space receives adequate sunlight to encourage the use of that space.

- Include adequate provisions for the use of private and semiprivate outdoor space, including yard hydrants, appropriate ground surfaces, supports for a laundry line, etc.

- Design each private and semiprivate outdoor space for its intended activity. Provide space of an appropriate size and proportion for the residents' needs.

- Provide adequate exterior lighting and shelter from rain and snow in all entries.
At these St. Paul townhomes a hedge marks the boundary between the public street and sidewalk and the front yard of the building. The hedges are carefully trimmed to a height that allow residents to see into the street from their windows.

In virtually all of the outdoor space around these townhouses it is unclear who “belongs” in the space or what activities are appropriate. Both residents and nonresidents have free access to the space.

The porches on these townhomes reinforce the building’s orientation towards the street, and with the entry stairs keep strangers at “arm’s length” from the private building edge, enhancing security.

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**Security**

- **Use semiprivate outdoor spaces (porches, patios, yards) to keep strangers at “arm’s length” from the windows and walls of the home.** This provides opportunities for residents to better control their space and see who is approaching their home.

- **Carefully locate semiprivate outdoor spaces and plan views from heavily used areas within the home to maximize views to streets, sidewalks, and shared spaces.** This increases opportunities for natural surveillance of the site. The front porch and picture window are both familiar elements that serve this function.

- **Limit the number of households sharing a single entry.** Where individual entries are not possible minimize the number of homes that share a single building entry, creating a smaller, more secure community around a single entryway.