



Housing Assistance Council

**INNOVATIVE DESIGNS
FOR NONTRADITIONAL
HOUSEHOLDS
IN RURAL AREAS**

\$4.00

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HAC, founded in 1971, is a nonprofit corporation which supports the development of rural low-income housing nationwide. HAC provides technical housing services, money loans from a revolving fund, housing program and policy assistance, research and demonstration projects, and training and information services.

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INTRODUCTION

Background

While popular images of rural life focus on the peace and quiet of the countryside, the absence of roads, buildings, and urban infrastructure can make life difficult for low-income residents. For people who live outside a “traditional” two-parent, single-family home – such as elderly people, persons with disabilities, unaccompanied male farmworkers and single mothers – the problems of rural isolation and lack of resources are made all the more acute.

While commonly-used models such as worker dormitories and nursing homes may be more convenient in terms of lower costs and simpler designs, they have not always met the needs of the populations for which they are targeted. Around the country, developers are now creating innovations in rural housing design that pay more attention to the specific needs of these groups while maintaining (or even increasing) design efficiency.

For innovative housing to be successful, it must be liveable for residents, affordable for builders, and acceptable to the surrounding community (Harrison 1999). However, the case studies compiled here should demonstrate that it is not only possible to think outside the box, but it is also possible to build decent housing there.

Methodology

For this report, the Housing Assistance Council (HAC) has compiled case study examples of four rural housing projects using innovative configurations for nontraditional rural households. The report focuses on populations outside of a “nuclear family” setting that have special needs in their daily lives, such as rural elderly people, persons with disabilities, unaccompanied male farmworkers and single mothers. Each case study includes information about:

- △ architectural design;
- △ provision of services;
- △ funding sources;
- △ applicable standards;
- △ zoning issues and
- △ other relevant topics.

Although this study examines projects with a variety of funding sources, case studies were also selected as illustrations of the kind of innovative housing designs that can be funded through the HOME program under the Department of Housing and Urban Development (HUD). The research, however, does not propose that households in any category should be prescribed to live in any particular housing model, nor that housing standards should be lower for some populations than others.

Preliminary sites were located through:

- △ referrals by housing and community development professionals;
- △ industry awards and
- △ press coverage.

Out of these sites, case study projects were selected based on representation of nontraditional household groups and variation of geographic regions.

For each housing category, the case studies are preceded by a literature review on housing design methods for that population group, along with a description of current national trends in that area.

Information for each case study was gathered first by interviewing developers and local government officials on the history and planning process for each housing development. Local zoning and architectural/environmental review procedures were also researched, as well as any local press coverage.

CATEGORY: HOUSING FOR RETIREES AND ELDERLY PEOPLE

Literature Review

The philosophy of how best to construct an environment to facilitate the aging process has changed significantly over the last 30 years. A key influence on architecture for aging has been the Independent Living Movement – a social movement that has fundamentally changed how society perceives issues of bodily ability, disability and aging. As recently as the 1970s, persons with disabilities were expected to be kept at home, or in institutions and away from public sight. When people with physical challenges were addressed by either the public or private sectors, they were addressed as patients or clients – people who are given care, but not given power over their own care.

Due to the efforts of activists with disabilities, the “problem” of physical challenges has been redefined in terms of disabling environments rather than “disabled” people, or “creating a social and physical environment in which people with a variety of disabilities can make choices about their lives and exercise the same rights as nondisabled people” (Nadeau and Thompson 1996, 107). In 1990, the passage of the Americans with Disabilities Act, Title III, put this philosophy to work by requiring that places of public accommodation, commercial facilities and certain private facilities be made accessible to persons with disabilities – including housing.

At the 1997 Cooperative Development Forum in St. Paul, Minnesota, gerontology expert Susan Lanspery spoke of successful senior housing developments as providing “choices, chances, and community” for their residents – choices about how to live, chances to participate in society, and the ability to live in a community where their needs can be addressed affordably (39). Without community, older people become isolated and vulnerable to illness and injury; but without choices, older people can also be deprived of their privacy and their autonomy as adults. In the literature on how housing design affects the physical, psychological and emotional needs of people who are aging, the “three Cs” constantly reappear.

Choices

Several studies have shown that choice over one’s living environment – particularly over one’s degree of privacy – is critical to the success of the aging process. In a study of 36 housing developments that received the Fannie Mae Foundation Maxwell Award for outstanding low-income housing, Rohe et al. (1998) found that “in several special-needs developments, the lack of individual bathrooms and cooking facilities was a major source of dissatisfaction among the residents” (xvi). The study recommended inclusion of half baths and kitchenettes in each unit as a way to provide more privacy and ease tension.

In another recent study (Kane et al. 1998), analysis of a 1995 data set of 605 assisted living facility (ALF) residents in 38 facilities revealed the same preference.

ALF residents rated the importance of a ‘private room and bath’ highest; 94 percent rated [it] as ‘1’ or ‘2,’ a higher score than any of the other 11 features rated – including

'a safe place to live,' 'access to medical care,' and 'good food' . . . No other factor, including length of stay, was significantly correlated with the preference for a private room and bath, in part because such a preference was very important to nearly all respondents (v).

In addition to the built environment, choice is also affected by income. Lanspery (1997) has pointed out that "there are lots of choices out there if you have a lot of money, but not very many otherwise" (39). The current demographics of aging mean that affordability will be an issue that grows in direct proportion to the elderly population, particularly in rural areas. As of 1995, 8.9 million rural householders were age 65 years or over – 27 percent of all rural householders. Out of these households, 85 percent were homeowners, more than half were poor or near poor and 21 percent were below the poverty line (Dolbeare 1999, 23).¹ Since women tend to outlive men, a disproportionate number of elderly people are single women, the majority of whom live alone – 45 percent compared to 19 percent of men age 75 and older (AIA 1985, 3).

As with virtually any aspect of health care, the process of modifying neighborhoods, public facilities and housing for accessibility can be extremely costly. Consequently, to ensure that choice over housing design is extended to elderly people of all incomes, government funding and public-private partnerships are essential. Rohe et al. (1998) found that among Maxwell Award winners, even with the most innovative use of new materials and more efficient designs, housing subsidies are still a necessity.

Virtually all the developments in our sample relied on grants or deferred-interest loans to make the units affordable to low-income households. None of the projects could rely solely on conventional loans or the low-income housing tax credit program (xv).

Chances

Lanspery (1997) relates that "there's a myth that a lot of people die right after they retire, but that's actually not true. A lot of people get depressed after they retire, but this has more to do with the fact that they no longer feel they have a productive role in society" (40). For people who are facing increasing frailty with age, the configuration of the built environment – as well as the services that are provided within it – determines to a large degree their chances for independent living. The provision of affordable services and amenities to older people increases their chances of playing an active role in their communities and keeping in touch with the world around them.

One critical service for aging people is transportation. Spas and Seekins (1998) estimate that out of 91 million people living in areas eligible for Department of Transportation Section 5311

¹ Dolbeare defines urban according to the 1980 Census definition as an area comprising "an incorporated place and adjacent densely settled (1.6 or more people per acre) surrounding area that together have a minimum population of 50,000." Rural housing, conversely, is housing "not classified as urban" (Dolbeare 1999, 14).

non-urbanized transportation services, more than a third (31.1 million) are classified as transportation dependent because they have no personal transportation. Out of those 31 million, 12.1 million (13.3 percent) are elderly persons, 11.9 million (13.1 percent) are persons with disabilities, and 3.9 million (0.4 percent) are elderly persons with disabilities (1998, 1).

Transportation is also the means to access other critical services, such as health care. In rural areas, health services are often not able to aggregate demand to create the same economies of scale that can be found in the cities and suburbs. A magazine on independent living once commented that “in rural areas, where vast distances make a mockery of ‘systems,’ individualization is not a choice – it is the only game in town” (Duffy 1994, 21). Not only are older residents often transportation dependent, they also depend on the ability of others to travel. An article on home health care in rural areas commented that in some areas, branch offices are often located anywhere from 40 to 120 miles from corporate home offices, leaving up to 60 miles between home visits (Tiongson and Arneson 1993, 20).

Rather than being the exception to the rule, the difficulties of dealing with physical challenges disproportionately affect rural areas.

Table 1. The Demography of Disability in Urban and Rural America

	Total Population	Disability Estimate	Disability Percentage	Severe Disability Estimate	Severe Disability ² Percentage
Metro Counties	208,912,958	38,525,048	18.4 percent	19,182,047	9.2 percent
Nonmetro Counties	53,542,312	12,542,834	23.3 percent	6,0147,737	11.2 percent
U.S. Total	262,755,270	51,067,882	19.4 percent	25,196,784	9.6 percent

Source: (Seekins, Innes and Maxson 1998, 3).

Although nonmetro counties have fewer numbers of persons with disabilities, their percentage is higher than both metropolitan counties and the U.S. population as a whole.

Community

In order to provide health and social services at an affordable rate, as well as a built environment that is appropriate to the changing needs of older people, many senior housing providers are looking to partnerships with their surrounding communities.

In a 1995 analysis of 1,333 Section 202 housing projects, HUD found that 45 percent of project

² The Census Bureau defines a person with a severe disability as someone who is unable to perform one of more activities, has one or more specific impairments, uses a wheelchair, or is a long-term user of crutches, canes or a walker. The Americans with Disabilities Act defines a disability as a physical or mental impairment that substantially limits one or more of the major life activities (Seekins, Innes and Maxson 1998, 3).

sponsors had to go to sources outside HUD to supplement their HUD funds for furniture and decorations in common areas. Nineteen percent had to obtain outside funds for landscaping (HUD 1995, 24-25). While expenditures on furniture and landscaping may seem to be frivolous, research has shown that attention to these details is actually critical to the physical and mental health of people who are aging. In its guideline on senior housing design, the American Institute of Architects emphasizes that the “comfort level” of older people grows more narrow with age, and as skeletal joints lose their elasticity and strength, chairs require more padding and sturdier backs and arms. Loss of visual acuity means that housing interiors need to be painted in bright, primary colors to enhance visibility (AIA 1985, 6-9).

Good landscaping is also necessary to eliminate the “institutional” look of a senior housing facility and make it a community that improves the morale of people as they age, rather than reinforcing an image of them as frail, deteriorating patients. Common rooms and community centers are also important for encouraging activity and socialization, while still retaining the privacy of individual rooms and baths.

Links with the surrounding community are critical not only for funding, but also for provision of services that enhance independence. Lanspery (1997) relates the story of a senior housing services coordinator who arranged a partnership with a local hairdresser to come to the complex one day a week and drive women to her salon, as well as arranging with a local supermarket to provide volunteer credits to high school seniors to help older patrons carry their groceries. The success of these efforts, Lanspery says, suggests that “local businesses should be reminded that older customers should be important to all of them” (43).

In senior housing design, an increasing number of developments are attempting to span the full range of services needed as people grow older so that they can not only maintain functionality, but so they also age in place with minimal disruption to their living situation. Continuing Care Retirement Communities (CCRCs) are aging facilities that offer the broadest spectrum of services, spanning the full continuum of care – independent housing, residential care services, senior/community center and nursing home facility. According to the American Institute for Architects, CCRCs account for roughly one-third of all retirement communities nationwide (1985, 51). While they represent a major innovation in housing for older people, CCRCs are also a major design challenge. Not only do their architects need to design each component of the development according to its own standards, but they also have to link them together through a design that is senior-friendly, aesthetically pleasing, and cost-efficient. Below are two examples of developments that begin to approach the comprehensive range of services in the CCRC model. They have gained notice in the low-income development community and can also serve as precedents for what innovative housing for older people can look like, while remaining affordable.

CASE STUDIES

Lakeland Wesley Village I and II Benton, Kentucky

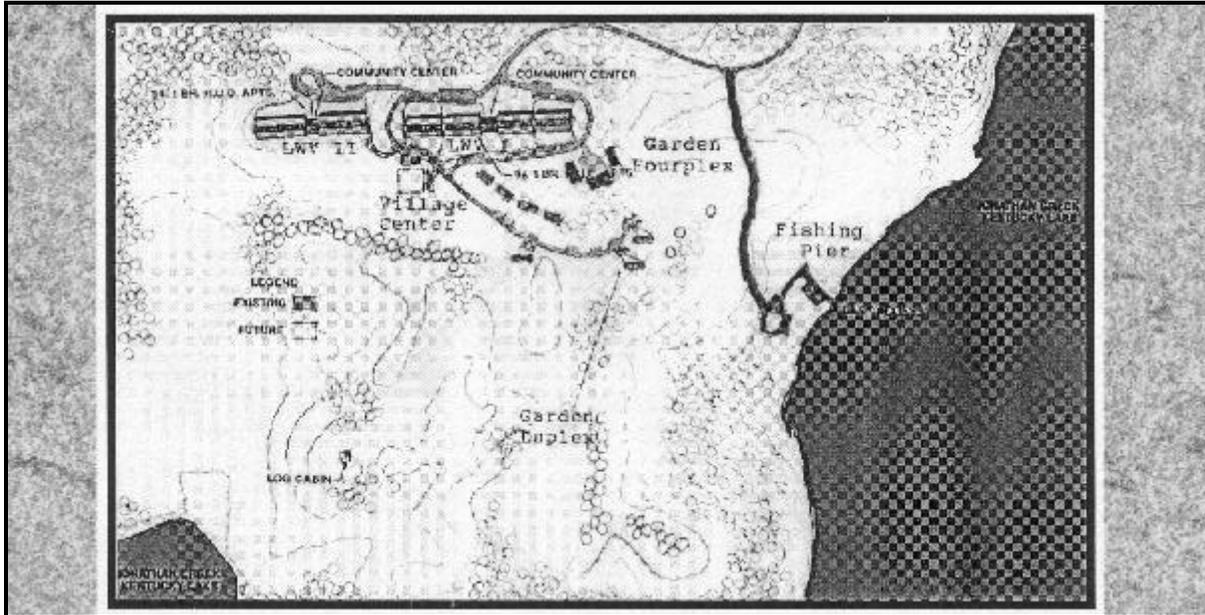


Figure 1. Lakeland Wesley Village, Overhead Plot Plan (Source: Lakeland Wesley Village).

In 1998, HUD featured Lakeland Wesley Village (LWV) I and II as case studies in its annual “best practices” report on affordable housing. The two complexes were built side-by-side, with two parallel rows of housing in each building. The site is located on 100 acres of wooded land adjacent to Kentucky Lake in far western Kentucky – an area that in 1991 was billed by Rand McNally as one of the top affordable retirement destinations in the country (Figure 1).

The Paducah District of Methodist Churches sponsored the construction of LWV I in 1981 as a “handicapped-friendly” retirement community long before Congress passed the Americans with Disabilities Act (ADA). The 96-unit complex was originally financed by a bond issue from the Marshall County Housing Authority and Health/Education Board, and the rent was subsidized by Section 8 (administered by the Kentucky Housing Corporation).³ Due to a combination of construction cost overruns and maintenance expenses (LWV I was a failed experiment in solar housing), the complex defaulted in 1983. However, it was revived nearly a decade later through a new bond issue and a takeover by the Lakeland Housing Associates, Inc. – a for-

³ The exact dollar amounts and financing details of the complex and its eventual takeover by Lakeland Housing Associates are no longer available, according to Wesley Housing Corporation staff.

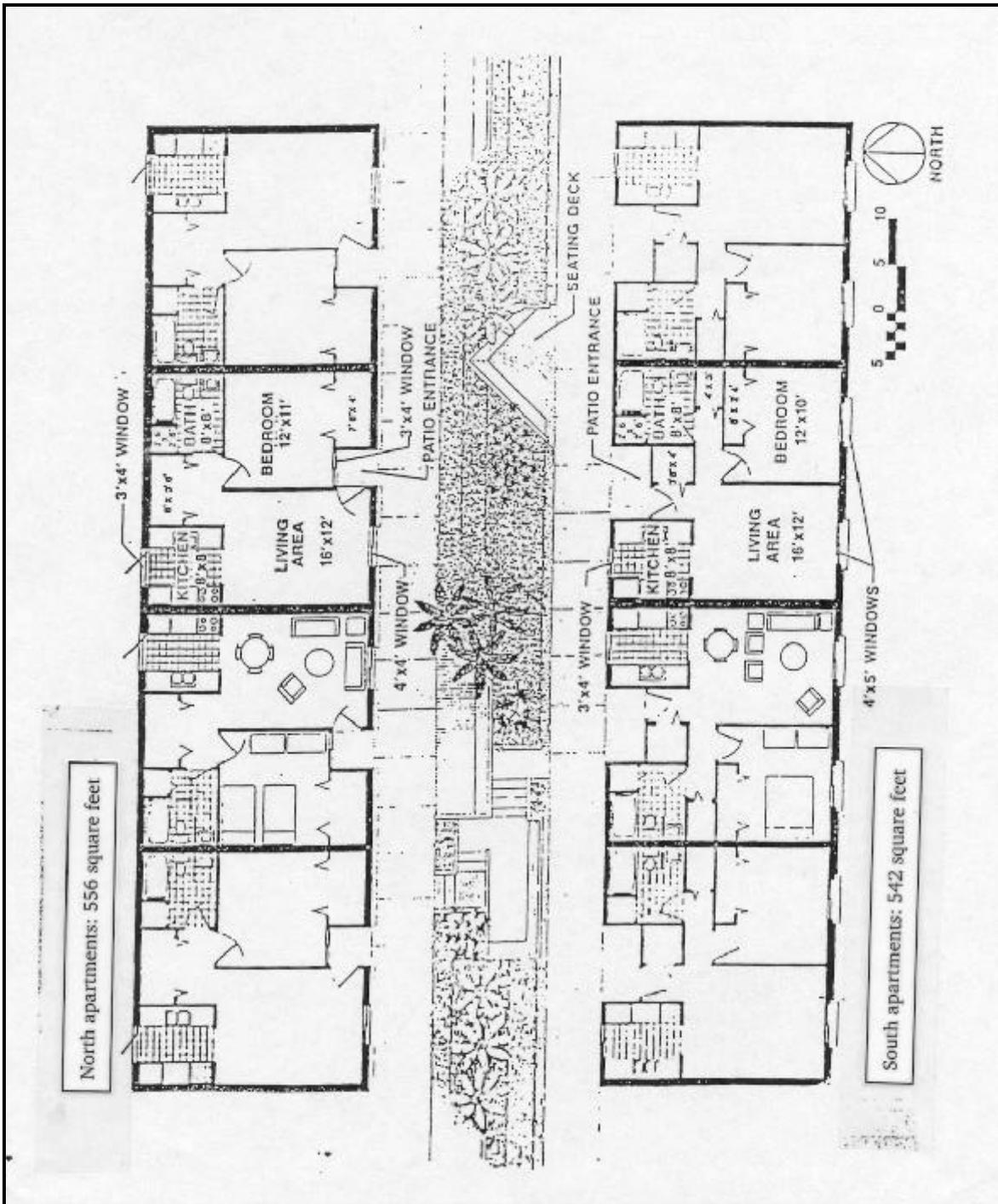


Figure 2. Lakeland Wesley Village I and II, Floor Plan (Source: Lakeland Wesley Village).

profit real estate limited partnership that purchased the building under the low-income housing tax credit program.

In 1984, LWV II was built with 64 units and subsidized through the Section 202 program, which at the time funded housing for elderly people and persons with disabilities. The second complex was smaller, better built and easier to maintain than the first; it was also sponsored by a local nonprofit – the Lakeland Retirement Community, Inc. In June 1998, Lakeland Retirement also built 34 new two-bedroom garden apartments in duplexes and fourplexes just outside of the original two buildings. The apartments, however, are unsubsidized (although below market-rate at \$630 per month) and are geared more toward independent living. Since the complexes were built in an unincorporated area of the county, there were no zoning or regulatory difficulties, and the area Methodist church’s sponsorship of the project precluded any community opposition (which does not usually arise with senior housing developments anyway).

The target market for the complex are seniors age 62 and older, and non-elderly people with disabilities who need affordable housing and health care. LWV I and II house 160 people who are mainly active seniors (52 percent), with the remainder frail elderly people (24 percent) and non-elderly persons with disabilities (24 percent). Typical residents are elderly single women with incomes ranging from \$8,500 to \$10,000 per year, and subsidized rents are \$150 per month with utilities included. The fitful history of LWV’s finances had one beneficial side effect: the fact that there are both Section 8 and Section 202 units available gives prospective residents a greater chance of qualifying for subsidized rents. While younger people with disabilities may not qualify for Section 202 apartments, they can qualify for Section 8. In addition, people with incomes too high for LWV I and II can turn to the new unsubsidized garden apartments.

According to the manager at Lakeland Wesley Village, the design for the original buildings was “fifteen years ahead of its time.” The design was a “solar berm design” which was intended to take advantage of the hillside terrain, leaving less exposure to outdoor weather. The floors are staggered” at four different levels, with two having a northern exposure, and two a southern exposure (Figure 2, above).

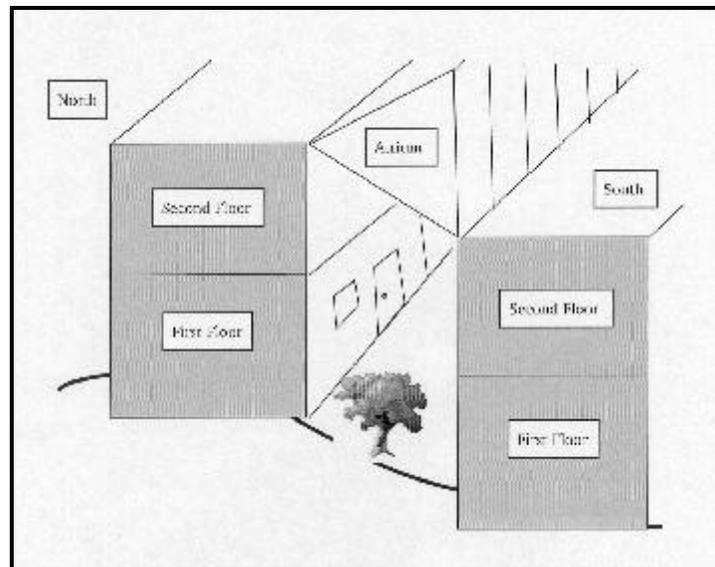


Figure 3. Lakeland Wesley Village I and II, Atrium.

The twin complex is best known for its indoor atrium, sandwiched between the two rows of housing units. Its climate controlled interior allows residents to have green space year round and the ability to visit the apartment office, mailboxes and convenience store without having to go outside in bad weather. The apartments have windows up to four square feet facing inward toward the atrium, as well as patio entrances on the ground floor and seating decks on the second floor (Figure 3, above). Having the “fronts” of the apartments all face inward also creates a greater degree of intimacy for neighbors, who can greet each other as they stroll down the sidewalks or wave to each other across the atrium; however, the “staggered” levels of the floors also create privacy by disrupting direct-line visibility from apartments facing each other.

Both complexes are equipped with elevators and ramps so that residents never have to negotiate stairs to any part of the complex. The one-bedroom units also have full private kitchens and enlarged bathrooms. However, while the solar berm design was highly innovative at the time, the manager feels that the complex would have looked very different if the target market had been directly involved in the design process. A smaller atrium, wider elevators and doorways, and easier emergency loading and unloading might have been more appropriate for the changing needs of the seniors living there over time – particularly those who become frail with age.

Nonetheless, the manager still felt that the development’s range of supportive services more than make up for any design flaws that have appeared over time. A wide range of services at Lakeland Wesley Village are made affordable through LWV’s “community investment” approach, working in partnership with local merchants and the area Methodist community. The complex has scheduled transportation into town three days per week, and every second Wednesday there is also a medical transport (both are available at a nominal fee). There is also a service coordinator/social worker provided through a 1994 HUD grant and a part-time wellness coordinator paid by rental revenues who both provide a large range of activities from bingo and “breakfast out” to exercise programs, prescription delivery, health screening and nutrition counseling.

The local Golden Cross Ministry provides light housekeeping and laundry services at a small fee, which can also be subsidized by rent from the apartments if medically necessary. The development also provides congregate lunches, and Meals on Wheels is available for residents who are house-bound. There is also a convenience store, a beauty and barber shop, a library and bookmobile, and a computer learning center with Internet access. Last, the complex provides 24-hour on-site staff, as well as pastoral care, grief counseling and nondenominational worship or Bible study.

According to the manager, the majority of the residents are very happy; many moved into the complex at retirement age in 1981 and lived out the rest of their lives there. Several residents have moved away only to move back later. Although most of their market is drawn from the surrounding 75 to 80 miles, some people have come to live there from as far away as New York. The nearest comparable subsidized rental housing is in the cities of Paducah and Hopkinsville; however, they do not have remotely the same range of services at an affordable price, making Lakeland Wesley Village one of the few places in the area that can enable people

into their 90s to have their own apartments and live independently. One local news article recently wrote about “The Village Pan-Handlers” – the complex’s own all-female “house band,” featuring members age 55 to 91 accompanied by piano, washtubs, bells, and a snack canister. The Pan-Handlers’ “kitchen gadget” sound is in demand throughout the area, and the band goes on the road 18 times a year. Overall, the manager described Lakeland Wesley Village as “the best-kept secret in Kentucky – but I wish it wasn’t!”

**Lakeview at Victoria Park
Waldorf, Maryland**



Figure 4. Entrance to Victoria Park (Source: Osprey Properties Group).

Lakeview at Victoria Park illustrates many ways in which senior housing design has improved since Lakeland Wesley Village I and II were built. The development was originally part of a 15-acre land parcel that was subdivided into three different properties, one of which was Victoria Park (the second parcel was developed into 100 townhouses and the other parcel was still undeveloped as of 1999). Although the area was originally zoned for low-density residential development (at five units per acre), the developers were able to obtain an exemption to develop Victoria Park as high-density. They were also able to obtain a zoning variance for a 10 percent reduction in parking space requirements.

Victoria Park is a tax credit development, with the developer receiving tax reservations from the Maryland Department of Housing and Community Development, Community Development Administration (CDA) in 1996. They were also awarded \$1.3 million in CDA-administered HOME funds for construction costs during the same year. According to the developer, there were few difficulties in securing funding for Victoria Park; however, working with the government was very time-consuming. The backing of the Charles County commissioners helped to ease the project through the local zoning process, as well as to obtain an impact fee waiver and lower the minimum age from 62 years old or above to 55 years or above.

The project was sponsored (and is currently managed) by Habitat America, a for-profit, woman-owned firm (not to be confused with Habitat for Humanity). Ninety-nine percent of

the property is owned through tax credits sold to the Related Capital Company (the equity partner). The remaining 1 percent (owned by a real estate limited partnership) is divided between Habitat America (7.5 percent), National Capital Association for Affordable Housing (a D.C.-based nonprofit – 7.5 percent), and majority partner Waldorf Elderly Limited Liability Corporation (85 percent). The project also received a \$3,237,000 construction loan through BankBoston and \$3,992,426 in permanent financing from American Property Financing (APF), a DUS⁴ underwriter for Fannie Mae.

The project was planned as affordable housing for low- to moderate-income seniors, 62 years of age and older; however, the restriction was later changed to “at least one person per household 55 years old or above” in order to make the housing more accessible to people locally. As of 1999, the complex was fully leased at 108 units; 74 percent of the occupants were single women, 10 percent were couples, 10 percent were single men, and the remaining 6 percent were elderly siblings or elderly parent-child households.

The project contains units affordable to a range of incomes, including four units affordable to people below 30 percent of area median income (AMI)⁵; 18 to people below 50 percent of AMI; and 86 to people below 60 percent of AMI. Monthly rents are typically well below the maximum allowable levels for almost all units.

Very-low income rentals (\$15,191 annual income):	\$369 for a one-bedroom \$411 for a two-bedroom
Low-income rentals (\$25,318 annual income):	\$595 for a one-bedroom \$695 for a two-bedroom
Below-market rentals (\$30,381 annual income):	\$630 to \$680 for a one-bedroom \$735 for a two-bedroom/one bath \$755 for a two-bedroom/two baths

The building design is a modified crescent shape with parking in front and in back (Figure 5, below).

⁴ DUS (Delegated Underwriting and Servicing) is a product that allows specially approved lenders like APF to originate, underwrite, close, sell to Fannie Mae, and service multifamily mortgages without prior Fannie Mae review. The arrangement is meant to permit APF to move as quickly as possible to meet borrowers' needs while still providing them with access to the best rates and products available.

⁵ As of 1999, Charles County area median income is \$78,900 (HUD 1998, Attachment 4).

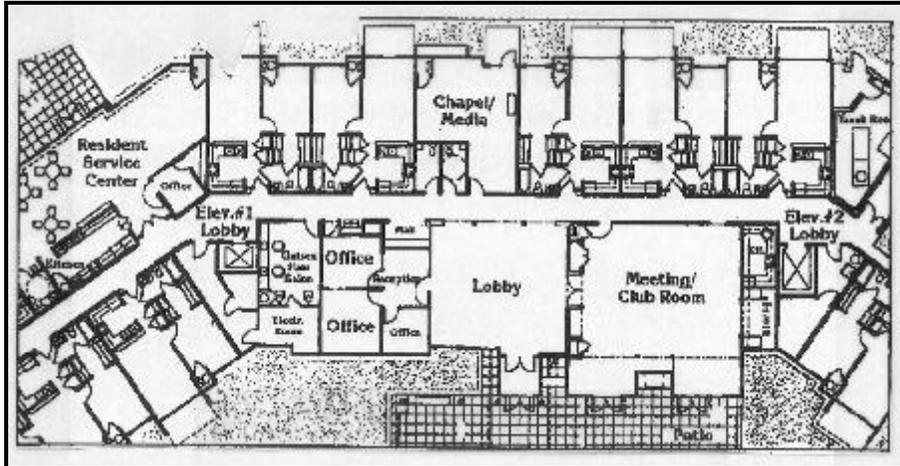


Figure 5. Victoria Park Building Design (Source: Osprey Property Group – also for Figures 6a-6d).

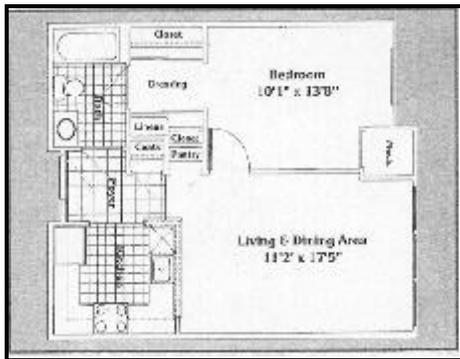


Figure 6a. One Bedroom, One Bath, 588 Sq. Ft.

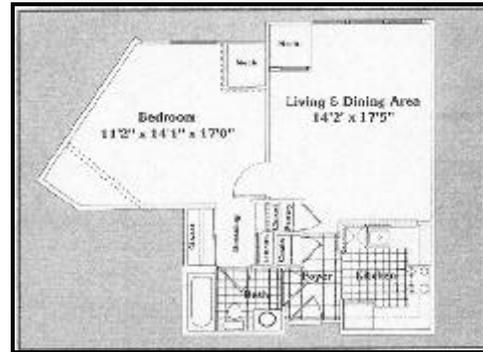


Figure 6b. One Bedroom, One Bath, 744 Sq. Ft.

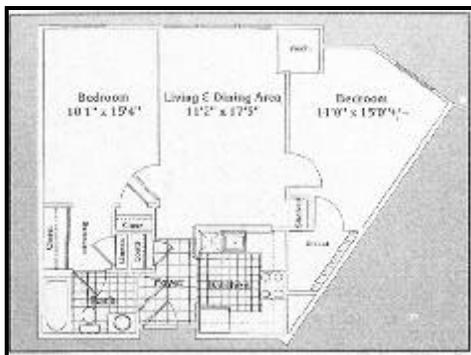


Figure 6c. Two Bedrooms, One Bath, 861 Sq. Ft.

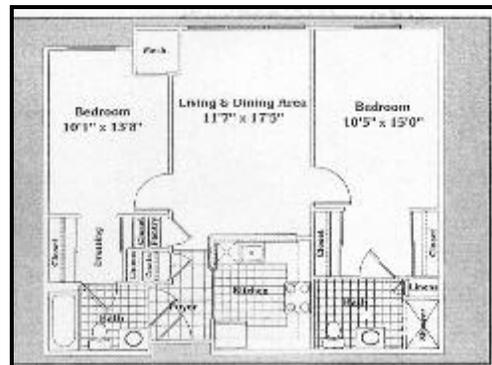


Figure 6d. Two Bedrooms, Two Baths, 894 Sq. Ft.

There are four different kinds of floor plans (two one-bedroom and two two-bedroom) that include patios, balconies and bay windows to take advantage of the view of the retaining pond (the “lake”) abutting the property. The living units are spacious – some almost twice as large as those in LWV I and II – and all have full kitchens and private baths (Figures 6a-6d, above).

Although the target market did not participate in the actual design of the project, the developer had built another retiree building with a similar structure, and polled residents there about their activity preferences and desired improvements before constructing Victoria Park. The prospective residents of Victoria Park were also requested to complete a survey at the time their applications were taken. The survey was used to determine the types of programs and services the tenants were seeking and to structure Victoria Park’s programming around those requests.

The developer felt that both the design and the design process worked very well; although the building design is site-specific, they would definitely use the overall design again. The developer believes that they have come up with a very workable lifestyle for people as they age, and are currently looking for new sites to build additional homes.

The building was designed to meet the changing physical demands of the aging process down to even the most minute details.

⊞ To address loss of sight and hearing, the wall accents were painted in bright primary colors, fluorescent light bulbs were installed in all light fixtures, and special attention was paid to sound-proofing between floors and units.

⊞ To address changes in mobility, hand-rails were installed on one side of the hallway, a “handicapped-access” button was installed for the front door, and there are handicapped parking spaces, two elevators, ramps, and a covered entrance-way available. There are also five units built specifically for persons with mobility challenges and three for residents living with sight or hearing loss.

⊞ To bring daily activities within seniors’ smaller “comfort zones,” amenities were added such as front-controlled ranges, enlarged refrigerators, “lazy susans” and pull-out drawers in kitchen cabinets. All doors have levers, rather than knobs, to eliminate unnecessary wrist strain. Bathrooms have offset plumbing so that it is not necessary to



Figure 11. Formal Meeting Room, Victoria Park (Source: Osprey Property Group).

lean over to turn on the water in the shower. Even the furniture is “senior friendly” – all chairs have backs, arms, and rounded, padded seats in order to make sitting down and getting up less stressful on the spine and legs (Figure 7, above).

- ⊞ To provide care for increasingly frail seniors, emergency pull-cords were installed in the bedrooms, bathrooms and community rooms, with calls handled through a third-party monitoring system.
- ⊞ To provide for security while maintaining maximum independence, the building was outfitted with “key-fob” access to the front door – residents only have to “flash” their personalized key-fob in front of a key-pad in order to unlock the door. With the help of internal video monitoring, residents can tune in to Channel Three on their own televisions and see who is at the front door before buzzing people in.
- ⊞ Although the residents pay for their own utilities, costs are kept down through use of a new “Aquatherm” system. The dryers in the laundry room are also operated through the use of pro-rated cards that charge only for the amount of time used, saving seniors additional money and eliminating the need to carry cash or search for change in coins.

Provision of services within the complex is facilitated by its location near the city of St. Charles – Victoria Park is within walking distance of the new St. Charles Towne Center Mall and across from a Target retail store. The county senior bus system (“Van Go”) stops directly at the front door of the complex and there is also an on-demand transportation service for trips that do not coincide with the bus schedule.

The developer has also partnered with local merchants to provide them with free space in the apartment building for services such as a local beauty shop and free sessions with an exercise trainer, which they can offer to residents because the merchants do not have to pay for overhead. The complex also provides an on-site office for visiting doctors, nurses and case managers from Home Health Care Partners to have a small examination room and table.

Common spaces such as the formal living room are set up to both encourage sociability through provision of card tables, a fire place and a large-screen television/stereo system and to provide “quiet areas” that are set off to the side with writing desks and magazines to read. There is also an open, well-aired library and billiards room with a full-sized pool table and reading/video materials provided by the complex. Although the complex does not provide congregate meals, residents have access to two large kitchens, and the staff provide take-out meals from local eateries on demand. Finally, to encourage continued fitness and ongoing learning, there is an exercise room with a weight station, treadmill and “New Step” machine, as well as a computer center where classes and access to the Internet are provided.

Lessons Learned

According to the American Institute for Architects’ guide to designing housing for seniors and older people, architects must create three basic kinds of environments:

- ⊞ common spaces sensitive to the changing needs of aging people;
- ⊞ residential spaces that extend and maximize independent living and
- ⊞ care facilities that are efficient and responsive to the needs of elderly people and that improve their care (AIA 1985, 5).

Within these spaces, Joe J. Jordan, FAIA gerontological planning consultant and architect, has suggested 12 “rules of thumb” for internal design that echo Lanspery’s (1997) “Choices, chances and community”:

- ⊞ increase opportunity for individual choice;
- ⊞ encourage independence;
- ⊞ compensate for sensory and perceptive changes;
- ⊞ recognize the problems of declining physical mobility;
- ⊞ improve resident orientation and comprehension;
- ⊞ encourage social interaction;
- ⊞ stimulate participation;
- ⊞ decrease conflict and distraction;
- ⊞ provide a safe environment;
- ⊞ make activities and services accessible;
- ⊞ enhance the public image of aging and
- ⊞ plan for growth and change in occupancy (AIA 1985, 10-11).

The two case studies in this chapter address the needs of the aging process in different ways through different forms of architectural innovation. There are strengths and weaknesses in both models; however, together they point toward the possibilities of creating integrated environments with comprehensive services that are affordable to older people and feasible in rural areas.

In Lakeland Wesley Village I and II, the design process could have benefitted from more direct involvement of the target market in terms of creating living spaces that are much larger, more maneuverable, and more appropriate to the increasing physical limitations that come with age. However, given that the complex was built from 1981 to 1984, long before ADA was enacted, its vision was remarkably ahead of its time. The creation of an indoor atrium to enhance mobility, sociability and exercise during all times of the year is virtually unheard of in any other low-income rural housing development for seniors and people with disabilities. LWV I and II were also able to use their partnership with the local faith community to provide an array of services to seniors at a very affordable rate – something that is typically very difficult to accomplish in rural communities, where distance and lack of commercial development infrastructure make health and social service delivery far more cumbersome and costly than in urban or suburban areas.

Lakeview at Victoria Park has taken an extensive understanding of the physical, social and psychological changes of the aging process, and created a structure that is extraordinarily fine-tuned to the needs of seniors. Nearly every detail, from floor plans to light fixtures, was thought out in terms of its impact of residents’ mobility, health and morale. However, transplanting Victoria Park’s amenities to a comparatively undeveloped rural area while

maintaining its affordability would be a major challenge. Innovations such as Victoria Park's Aquatherm heating and cooling system could help keep utility costs down; however, units that are affordable at 50 percent of Waldorf, Maryland's area median income would be well out of reach for older, low-income residents of Benton, Kentucky.

The absence of a major road by the Lakeland Wesley Village had indeed kept the development's existence a "well-kept secret." In order for LWV I and II to have the same visibility and "curb appeal" that Victoria Park enjoys, it would need to partner with the county government to either build a major road by the site or to set up signage along the nearest major arteries to call attention to its presence. Such a marketing partnership would not only benefit Lakeland Wesley Village, it could also benefit the county. Retiree attraction has become a major growth strategy for many rural areas around the country, and Kentucky Lake has already gained attention as an affordable retirement living area.

CATEGORY: HOUSING FOR LOW-INCOME, WORKING SINGLE HOUSEHOLDERS

Literature Review

Within rural areas, poor people are not only far more likely to spend more than 30 percent of their monthly incomes on housing costs, people living in substandard housing are also likely to be cost-burdened. In 1995, 42 percent of poor rural households had severe cost burdens, spending more than 50 percent of their monthly income on housing; another quarter of poor households were spending 30 to 50 percent for their shelter. This trend reverses dramatically for households in the “near-poor” income ranges (between 100 and 200 percent of poverty level), with 8.5 percent of households severely cost-burdened and 24 percent moderately burdened (Dolbear 1999, 19).

Although solutions for housing affordability are often seen in terms of public/private investment in low-income housing, a less obvious part of the equation is how the housing itself is built. Architect Patricia Harrison (1999), an expert on housing design for migrant farmworkers, has argued that in addition to advocacy and community development, low-income rural communities “need new housing forms to provide decent shelter, reduce project costs, and overcome community opposition” (170).

Balancing the needs of low-income working people with the imperative for inexpensive and more efficient housing is often difficult for developers, often resulting in housing that is either poorly built or designed like dormitories or army barracks. According to Harrison, effective housing designs for affordability should be smaller, more densely populated, use new and efficient materials, fit the social and economic means of low-income people, and be a “good neighbor” in terms of their appearance, scale, and the number of residents on the site (1999, 172). A good housing design must also be accompanied by “nonarchitectural” elements such as well-designed management programs and social services, a range of spaces for personal privacy, family interaction, and age-appropriate activities, and a community-oriented look that respects the character of surrounding residences (1999, 183).

For many developers of rural, low-income housing, balancing the demands of affordability with socially and aesthetically appropriate design is a difficult task; however, in several instances, there have been successes through the use of design innovation and well thought-out programming.

Housing Farmworkers: Beyond Bullpens and Horse Stalls

Since the farmworker labor force began shifting from family labor to migrant labor in the 1930s and 1940s, farm laborers – particularly seasonal migrants – have been one of the most challenging low-income worker groups for which to provide adequate shelter. After the catastrophic droughts of the Depression era caused massive interstate migration of impoverished farmworker families, the Resettlement Administration was founded by the government in 1936 to address their need for safe and affordable farmworker housing. In 1940, the Resettlement Administration gave way to the Farm Security Administration (FSA), which went on to build 53 mobile camps, 826 labor homes, 4,148 shelters, and 4,930 tent

platforms in the migrant destination states of California, Arizona, Idaho, Oregon, Washington, Texas and Florida (Bell 1997, 5).

From 1940 to 1947, World War II drained the supply of local agricultural labor in many communities, increasing the demand for out-of-state workers. In the northeastern U.S., this trend led to the immigration of white and African-American families from the south (giving way, in turn, to unaccompanied single men in the 1960s) (Bell 1997, 5). In addition, the Bracero Program of the 1960s allowed Mexican farm laborers to be brought legally into California for short periods of time; when the program ended in 1965, many families opted to obtain legal residence status and live in California (Harrison 1994, 18).

During this time, the agricultural worker dormitory (known as the “bullpen”) was introduced as a more efficient way to house migrant workers, particularly single men. The bullpen consisted of a set of bunks in one large, common room with shared kitchen and bathroom facilities. The organization of communal cooking and cleaning depended on the presence of “crew leaders” who routinely abused their position by overcharging workers for food and other necessities. In addition, crowded bathroom facilities were frequently left unclean, leading to health and sanitation problems (Bell 1997, 5). In the 1970s, many states passed legislation monitoring farmworker housing more closely and setting up building codes. The regulations led to a new type of design, the “horse stall,” consisting of adjacent units, typically with four beds each, a sink and a stove. Nevertheless, bathrooms were still communal and overcrowding was common (8).

As of the mid-1990s, the U.S. Department of Labor reported that seasonal workers performed more than 80 percent of all California farm work. The number of farm employees in the state ranges from more than 500,000 workers at peak season in September to a reported low of 253,000 in February. However, the amount of housing has not kept pace with the numbers of workers. According to Harrison (1994), the California Department of Housing and Community Development reports that registered employee housing sites declined from a high of over 5,000 in 1968 to just over 1,000 in 1994 (18-19).

In the late 1990s, barriers to safe, clean and affordable farmworker housing were many. First, wages were severely inadequate and the availability of work was often precarious. The 1989 National Agricultural Workers Survey (NAWS) reported that two-thirds of migrant farmworkers lived below the poverty line and that their annual median income was \$5,000. Unpredictable seasonal labor often means that migrant laborers are only able to work an average of 29 weeks per year. Nonprofit housing developers cite funding shortages, land acquisition difficulty, restrictive zoning laws, community opposition, lack of public water and sewer, and lack of organizational capacity as major barriers (Lopez 1995, 3, 7). Finally, growers are also reluctant to build housing due to housing regulations and liability insurance for on-site employees (Harrison 1999, 178).

In a study interviewing 80 farmworkers from California, Harrison (1995) found that there was no “typical” farmworker – the study discerned six distinct groups based on factors such as migration circumstances, number of years in the seasonal labor market, legal residence, English language skills, and vehicle ownership. However, the most numerous group in the

study was Group 3 – unaccompanied men:

The group is composed of single men, mostly young and generally married, who move from job to job, traveling alone or with one or two other male companions, without a pattern of regular employment . . . They are apart from their families for long periods, are often lonely, and are very worried about their long-term financial status (27).

Unaccompanied men are the group most at risk for substandard housing, not only because of their irregular employment patterns and social isolation, but also because groups of single male minorities are often perceived as a crime risk by surrounding communities. According to Harrison, unaccompanied migrant men can afford limited rent, but their priority is to save money to send home to their families. Consequently, they are often left with inadequate lodgings.

The remarkable and even inspiring quality about these men is their sense of self dignity in the face of such difficult experiences. Many even display a kind of wry tolerance of their situation. Most are essentially family men searching for ways to support their families, and this purpose appears to help them bear the indignities of the day with a certain attitude of tolerance but not acceptance . . .

As to matters of housing, they said that their chief priority was to stay in a place of safety. Many had tried Stockton's homeless shelter, but found it a dangerous place. Drug and alcohol addicts, mentally unstable people, and social misfits are not the farmworkers' idea of reasonable roommates (1995, 28).

The emphasis on safe surroundings and respectable neighbors has also appeared in other farmworker studies. In an assessment of an innovative farm community in Arvin, California, Harrison (1994) noted that, "questioned by local labor contractors, male migrant workers expressed concern about potential fights, alcohol abuse, and theft in an all-male environment" (21). Research by the Housing Assistance Council has also indicated that, although unaccompanied males comprise a large portion of the farmworker population, migrant farmworkers prefer to travel with their families (HAC 1997, 36).

Integrating unaccompanied men with farmworker family housing is one possible approach to achieving increased affordability while also paying attention to their social needs. Development practitioners have observed that "most housing managers are wary of placing these two groups in the same facilities. Often there is the perception that unaccompanied men's behavior is not compatible with family life" (Lopez 1995, 5). However, the above interviews indicate that this may well be a misperception. In addition, Harrison (1995) has observed that a supportive, multi-family environment with the same culture is often critical in promoting migrant male workers' employment chances. In the "ladder" of farmworker sub-groups, semi-permanent male residents (who have more housing and job stability than Group 3 migrant males), indicate the importance of a social network for their well-being – and housing structures that promote that kind of support:

Apartments or small houses built around a concept of single men living together, and

well-integrated into Hispanic, family-oriented neighborhoods, would be reasonable living circumstances, they thought.

The importance of the Spanish-speaking neighborhood was significant to them. With their somewhat fragile livelihood, it seemed important to them to be in a community where they could communicate well and would be recognized as employed family men.

Living together permitted them the security of knowing one's cohabitants and allowed them to save some on expenses for food, utilities and transportation. The ability to develop a strong support group no doubt bolstered their success in the labor system (Harrison 1995, 27).

Harrison's interviews with Group 3 migrant men indicated that a county-operated system of communal bunk-houses with communal showers, kitchens and laundries would be acceptable housing to them. However, the experiences of more established farmworkers suggest that, while bunkhouses and roadside rest-stops are critically necessary stopgap measures, ultimately these men need a more integrated family atmosphere to enhance their life chances, stabilize their work situation, and eventually enable them to bring their families with them. The ownership of a car, van or pickup truck can often serve as a tolerable substitute for a home; however, Harrison has observed that out of California's migrant farm laborer population (which goes from 500,000 at peak season to 253,000 in February), 78 percent said they would prefer not to travel beyond normal commuting distances to work (1994, 18).

The following two case studies are examples of how housing for unaccompanied male farmworkers has been successfully integrated into family-oriented developments using architecture that has not only substantially lowered building costs, but that also made the projects "good neighbors" within the surrounding area.

CASE STUDIES

The Aurora Farmworker Shelter Berlin, Wisconsin



Figure 8. Migrant Farmworkers, Aurora Farmworker Shelter (Source: Lopez 1995).

In 1993, United Migrant Opportunity Services, Inc. (UMOS) was looking for a site to build housing for farmworkers using USDA Section 514/516 funds. They found a site in Berlin, Wisconsin where a grower had changed crops and no longer needed his migrant worker housing complex, which consisted of eight duplexes. UMOS gained site control in 1993 and applied for Section 514/516 funding during 1994 and 1995, during which time they operated project as a shelter. They built eight additional duplexes for a total of 32 living units, five of which could be used as housing for single farmworkers.

When it opened, the Aurora Farmworker Shelter was named one of USDA Rural Housing Service's model projects. The target market for the shelter was the large population of farmworkers in Waushara County, which has the highest concentration of migrant farmworkers in Wisconsin. The increasingly common practice of contracting with companies to bring workers directly from Texas has enabled growers to take advantage of a very low-cost labor pool anxious for work. The average yearly income for Aurora residents ranges from \$9,000 to \$12,000 – well below the area median income. The principle area employers are Green Giant and Stokely Plants.

The main goal of the project was to combine seasonal apartment housing with day-to-day shelter facilities in a flexible arrangement. For 14 days, farmworkers (either alone or with families) can stay at the shelter free of charge through USDA rental subsidies. This time period gives them an opportunity to either search for jobs, other housing, or both, and to stabilize their living situation. After their initial 14 days are up, they can rent on a monthly basis. Rent is charged on a month-to-month basis and is restricted to below 30 percent of workers' gross monthly income.

According to UMOS's private sector liaison, this is the only farmworker housing program in the country that does both shelter and monthly rental housing, and that does rental subsidies on a daily basis instead of monthly. Shelter housing tends to be very expensive to operate because of the amount of services and supervision that are needed (Aurora has a 24-hour on-site manager, a maintenance worker, and a social services provider). The rental housing is available on a seasonal basis, with seven to eight months occupancy out of the year. The Aurora Shelter is used by 500 to 1,000 people per year.

UMOS hired an architect to design the project and, although the future residents were not directly involved in the design, the process went through UMOS's board of directors, which is composed mostly of current or former farmworkers. While most housing by private growers consists of worker dormitories or trailer homes (at best), the Aurora shelter offers actual apartment housing. The cost per unit to develop the complex was \$22,000 (Figure 9).

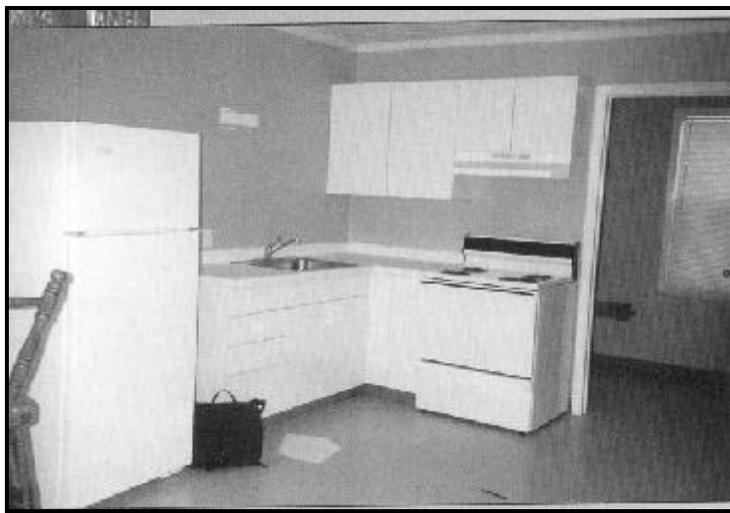


Figure 9. Newly Renovated Unit at the Aurora Center (Source: Lopez 1995).

After the project was constructed, UMOS discovered that the existing sewage system would not be adequate for the complex. Consequently, it became the first development funded by USDA Rural Development that was allowed to put in holding tanks for sewage waste. In order to reduce air conditioning costs during the summer, project designers installed ceiling exhaust fans. The wall paneling is made of Kemply, an inexpensive durable material used in college dorms and portable offices (Lopez 1995, 6) (Figure 10, below).

The complex was also built up to Wisconsin's migrant housing code, which is highly specific and enforced by four to five housing inspectors for the state's over 100 labor camps. The private sector liaison said that the requirements did not pose any difficulties for UMOS, which was already accustomed to building farmworker housing up to code. Ten percent of the units are also handicapped-accessible, in compliance with ADA.

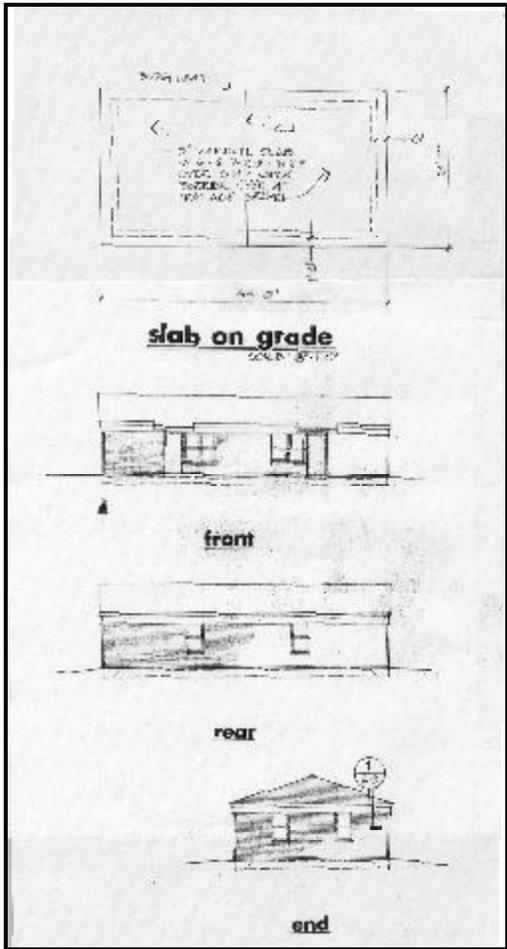
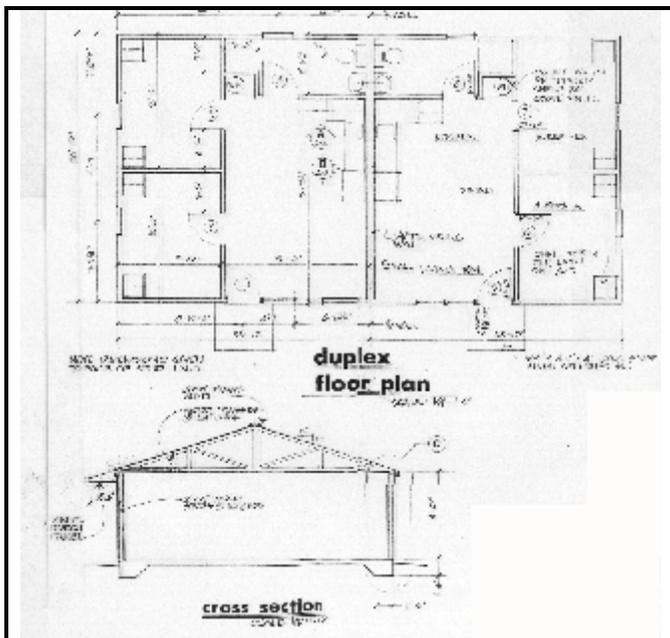


Figure 10. Aurora Farmworker Shelter: Men's Duplex Design (Source: UMOS).



The project did not confront any NIMBY (“Not in My Back Yard”) resistance from area residents. Wisconsin has a state law that prohibits local zoning from interfering with any existing migrant farmworker housing; however, UMOS went through the review process simply to give the public a chance to voice any concerns.

Funding came from a combination of federal and state programs, as well as local fundraising by UMOS:

USDA Section 516 Farmworker Housing Grant	\$765,000
Department of Health and Human Services (HHS), Head Start Grant	\$350,000
USDA Section 514 Farmworker Housing Loan	\$85,000
UMOS Fundraising	\$5,000
Wisconsin Department of Administration, Housing Division Grant	\$50,000/year

In addition, UMOS was able to use funds that were available for its other projects:

HHS Community Services Block Grant	\$30,000/year
HUD Emergency Shelter Grant	\$50,000/year
Department of Labor, Jobs Training Partnership Act	\$1.2 million/year

In addition to integrating space for families and single men, both Aurora and its sister development, the Montello Farmworker Shelter, are Head Start locations with day care facilities. The Aurora Head Start facility serves up to 100 children (for both residents and area families). The day care centers were built using a modular design that was built off-site in five pieces, brought to the site and assembled there (Figure 11).

According to UMOS’s housing development specialist, the complex has been a success, averaging a 10 percent vacancy rate. The private sector liaison felt that the design had worked very well and that he would be willing to use it again for a project with a similar market to Aurora.

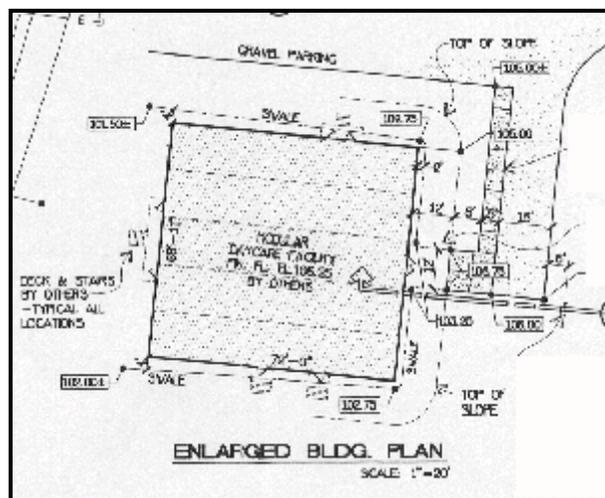


Figure 11. Aurora Center Modular Day Care Facility Design (Source: UMOS).

East Bay Estates
Winter Garden, Florida



Figure 12. Single Family Home, East Bay Estates (Source: HIP, Inc.).

For many experts in “new housing” forms, reliance on single-family housing to provide affordable shelter for rural residents is quickly becoming a losing proposition. Housing costs and the changing composition of American households have made smaller, medium-density developments look increasingly appealing. However, in the mid-1990s, a nonprofit housing provider in central Florida achieved a rare feat – the organization was able to create single-family homes in a subdivision that were attractive, efficient, and affordable to single parents and low-income workers.

In 1995, Orange County targeted Winter Garden, Florida as an affordable housing development area. The area, which is a rural community adjacent to Orlando, suffered from absentee ownership and had been left with many abandoned and dilapidated buildings. Seeing the opportunity, Homes in Partnership (HIP), Inc. – a nonprofit operating out of central Florida with nearly 25 years of low-income housing experience – applied to the county for the land to be designated as an affordable housing site.

During construction, the task of working with both the city of Orlando and Orange County required meeting two different sets of planning requirements. For example, in order to get water and sewer hook-ups, the subdivision had to be annexed into the city; however, they had to wait for the ground acquisition and land development to be done first, since HIP was operating under the auspices of Orange County during that phase. While occasionally stressful, these issues were resolved through consistent, open communication and careful planning. The problem of NIMBY (“not in my backyard”) resistance never surfaced – the

neighborhood was already racially mixed and the development provided much-needed housing. HIP, Inc. also helped other families in the area to obtain housing rehabilitation loans and grants, which further improved both the neighborhood and their standing.

The houses cost \$70,600 each to develop and had an average of 1,411 square feet per unit; however, HIP was able to receive roughly \$20,000 in subsidies per house, bringing the average mortgage down to \$49,200. Homebuyers could also further buy down their mortgages by using their own sweat equity in combination with downpayment assistance from the Florida State Housing Initiative Partnerships (SHIP) program. The units were directly purchased by the occupants and as of 1999, the subdivision is managed by a homeowners association.

Financing for East Bay Estates was a diverse public-private partnership that made use of federal, private, community and volunteer resources.⁶

Development Financing:

USDA Rural Development Administration Section 502 Program (Loans)	\$1,279,200
Orange County CDBG (Grant)	\$339,482
FHLB Affordable Housing Program (Loan)	\$169,000
Homes in Partnership, Inc. (Construction Loan)	\$46,800

Permanent Financing:

Homeowners (Sweat Equity)	\$46,800
Orange County CDBG (Grant)	\$300,482
USDA Rural Development Administration Section 502 Program (1 to 7.25 percent, 33-year first mortgages)	\$1,279,200
Orange County CDBG (zero percent, five-year forgivable second mortgages)	\$39,000
FHLB Affordable Housing Program (zero percent, 20-year forgivable third mortgages)	<u>\$169,000</u>

Total Development Cost	\$1,834,482
Actual Cost per Unit	\$70,557

The Orange County Community Development Block Grant (CDBG) program provided the majority of the housing equity, with the remainder consisting of sweat equity from the prospective homeowners. Development loans came from the U.S. Department of Agriculture Section 502 Program, the Federal Home Loan Bank Affordable Housing Program, a construction loan from HIP, Inc., and the Orange County CDBG Program. There were no problems with the financing – HIP, Inc. had worked with Florida Rural Development for 23 years and its loan packagers were very familiar with the Self-Help Housing eligibility requirements. Twenty-six of the homes were financed using USDA Rural Development Section

⁶ A project profile for East Bay Estates, including funding, can be found in the Fannie Mae Foundation's *Maxwell Awards* publication (1998, 33).

502 loans with flexible interest rates. Four additional homes were financed through private bank bonds for a total of 30 houses in the subdivision.

The average gross income of East Bay Estates households is \$14,364 with an average household size of three persons. Twenty-three households are at 50 percent of area median income or less, and three are at 51 to 80 percent. Although most of the residents are women who are employed nearby at Disney World, there are also three units housing single male farmworkers employed at local plant nurseries. HIP, Inc. did not intentionally target these groups as potential homebuyers – its projects have always been made available on a “first come, first served” basis. However, the project was an ideal fit for these groups, particularly since it provided affordable, attractive housing near a major highway (the East-West Expressway), with convenient access to major service-sector employers.

Using a “mutual self-help” and sweat equity approach, HIP, Inc. organized teams of five to eight adults to contribute labor to their home and those of their neighbors, instilling a “team spirit” as the housing was built. The project also required ongoing, mandatory counseling classes by HIP’s HUD-certified staff.

The standards used to build East Bay Estates were that the homes had to be affordable to households at 80 percent or less of the area median income (AMI) level. They were also intended to have low-cost maintenance and energy-efficiency (HIP installed R-30 insulation, heat-pumps on the air-conditioning units, and ceiling fans). As a result, household power bills were rarely more than \$100 in the summer, and winter heating bills were \$40 to \$50. HIP also installed streetlights and deadbolts on the doors for safety.

Designed by a private architect, HIP’s homes have always been built with concrete blocks, because they are inexpensive to maintain and are resistant to hurricanes and termites (Figure 13, below). However, to avoid a dreary “cookie-cutter” project appearance, HIP designed different house plans for the homebuyers to choose from, with different roof lines, elevations, and coordinating color-scheme “packets” (Figure 14, pg. 31). Loan packagers would steer prospective buyers away from designs or colors that were already being used by someone adjacent to them in order to keep the subdivision looking tastefully individualized. Although no persons with disabilities applied to become homeowners at East Bay Estates, HIP would also have been able to make any home wheelchair-accessible, installing amenities such as wider doorways and bathrooms with safety bars.

HIP, Inc. constructs several subdivisions each year, and its basic design process has worked well in each of them with some slight modifications. The designs and design process used at East Bay Estates have already been replicated in six additional subdivisions, as well as some scattered-site projects. The lots at East Bay Estates were 50 feet wide, requiring building designs with more depth; wider lots would require slight modifications with less depth.

According to the developer, the residents are very happy. They have started their own homeowners’ association, have their own newspaper and are very active as an organization. As a finishing touch, HIP even added a white picket fence around the subdivision “for everyone who dreamed of owning a house in the suburbs with a white picket fence.”

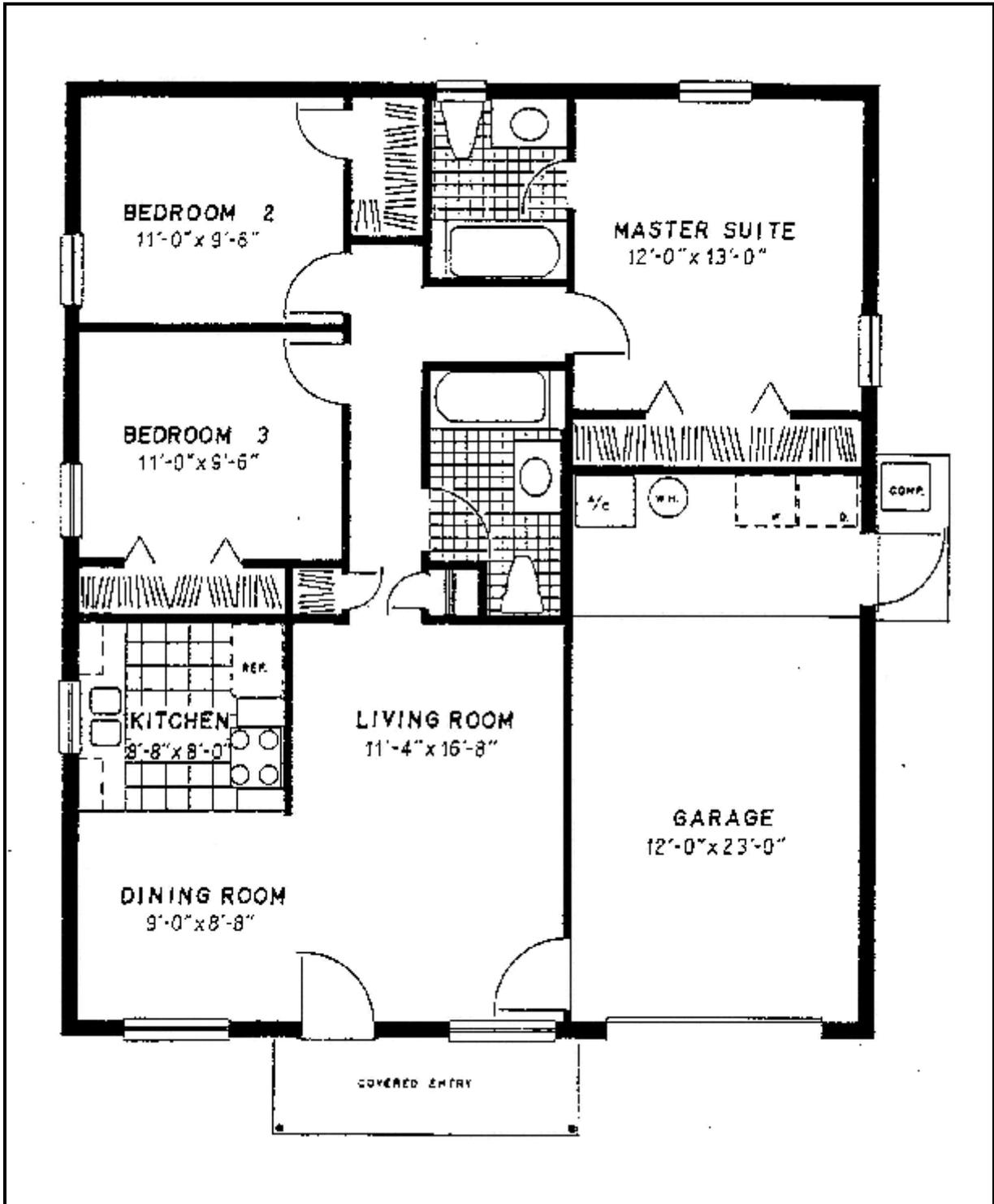


Figure 13. Basic Floor Plan, East Bay Estates Single Family Home (Source: HIP, Inc.).

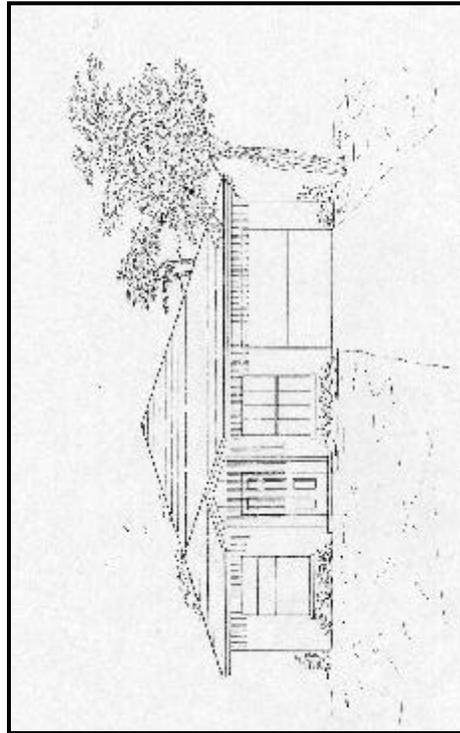
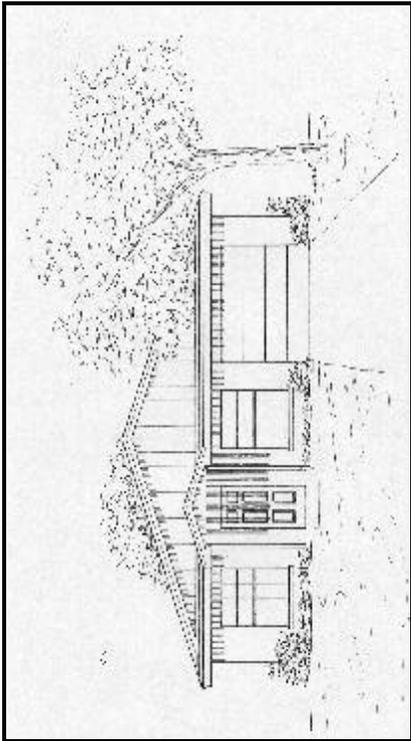


Figure 14. Variations on a Theme: Different Roof Designs and Paint Styles (Source: HIP, Inc.).

Lessons Learned

For the poorest of poor workers, the need for safe and affordable housing has reached critical levels. The most obvious barrier to safe and affordable housing is funding. As of 1999, the only federal program to provide housing specifically for farmworkers is the USDA Rural Housing Service Section 514/516 program, which provides housing loans to growers and loans and grants to nonprofit sponsors.

However, a much less obvious barrier to low-income housing is the perception that housing affordability and quality are mutually exclusive. Not only do low-income housing designs that look like prisons, barracks and institutions antagonize neighbors, they also demoralize the people who live there. D. Blake Chambliss, a senior housing specialist with the Foundation for the American Institute of Architects, emphasizes that the degree to which a housing design will impact the daily round and social needs of the people living there needs to be thought out in detail far before the actual construction begins. When design flaws are built into a project, those flaws tend to wreak havoc in many other areas, “Inadequately and inappropriately-housed residents are a management nightmare to the owners and to surrounding neighborhoods” (1997, 2).

When it comes time to set budgets for housing programs, many officials see housing design and housing affordability as a zero-sum game – the more effort that is placed in design, the more the house will cost, and the more money will be lavished on frills and ornamentation at the expense of the taxpayer. However, award-winning architect Sam Davis reports that “70 percent of the cost of a new dwelling is affected by planing and design. Careful planning and sensitive design that save even 10 percent of those costs can reduce the monthly payments by \$100 in perpetuity” (1995, 3).

Nonetheless, while design innovation can help increase a project’s longevity and efficiency, it can also result in architecture that is extraordinary in its vision but still wildly inappropriate for its target market. In the area of farmworker housing, many different forms are currently under experimentation. In 1999, Washington Governor Gary Locke unveiled a new housing complex for migrant workers in Grant County called “La Esperanza,” which featured units constructed out of 40-foot-long refrigerated overseas shipping containers. Each unit had its own air conditioning, bunk beds, kitchen and bath facilities and only rented for \$10 a day per family (Davila 1999, sec. A, 1).

However ingenious and affordable this design may be, it still leaves one element out of the equation: dignity. In terms of pride and morale, housing people in shipping crates is not a large improvement over “bullpens” and “horse stalls.” While human dignity may seem to pale in importance to cost-effectiveness, historical experience has shown that inhuman housing designs (no matter how sturdy or inexpensive) exact a price from their neighborhoods. Affordable housing architect Sam Davis has observed that “housing is a key ingredient in community building. Islands of low-income projects that are socially, economically, and architecturally cut off from the surrounding communities compel their inhabitants to be detached and alienated” (1995, 3).

Through its development of the Aurora Farmworker Shelter, UMOS illustrated how it is possible to operate both a short-term shelter and a seasonal apartment complex while still keeping costs to a minimum. Even though the housing design is fairly simple, the addition of a Head Start facility and the availability of green space for recreation has created a more community-oriented environment that can meet the full range of needs for the people living there. Architectural innovations such as the installation of holding tanks for sewage and ceiling exhaust fans for air circulation helped to keep maintenance costs down.

In the example of East Bay Estates, HIP, Inc. demonstrated that it is entirely possible to have the best of all possible worlds by using a little creativity and architectural sleight-of-hand. Even by using something as simple as different color schemes and roof lines, HIP was able to spin six different housing designs out of one simple floor plan – without bringing housing mortgages over \$50,000. This “trick” has been mentioned more than once in the literature on affordable housing architecture. Harrison (1999) comments that “personal identity may be given to individual units through differentiation of forms, off-setting dwellings from one another, and color and material variation” (183). Davis (1995) has also illustrated how the careful selection of color and materials for common elements of buildings is a very cost-efficient way of adding life to the design, so that “functional elements like gutters, downspouts, and window trim take the place of friezes and cornices in providing scale, texture and vitality” (112).

Harrison’s (1994) assessment of the Arvin farmworker housing experiment brings home another point – that a need for affordable housing will not translate into a market for affordable housing unless the wants of the target market are addressed. In the Arvin experiment, the city built 50 trailers with six bunk beds each along with a small kitchen, shower and toilet. The housing was intended for single male migrant workers; however, when the complex was opened, it went virtually unoccupied for the first seven months of its operation. It was only when the city obtained permission to convert the trailers to family housing that the complex became solvent – “within three weeks all dwellings were rented and there was a waiting list of more than 80 families” (1994, 20).

A key lesson from Arvin, then, is that even though there is a great need for migrant housing for unaccompanied men, this fact does not necessarily mean that they want to live in a male-only atmosphere. As stated above, many studies of farmworkers show that unaccompanied men are typically married and have a desire to live in a community with families from the same cultural background.

CONCLUSION

Although the “traditional family” (as memorialized by television’s Ozzie and Harriet) has long been the ideal for how American households should be composed, households where a homemaker mother, wage-earner father, and children all live together are the exception. As of 1990, 18 percent of white women, 8 percent of African-American women, and 22 percent of Hispanic women had families that fit this description (McLanahan and Casper 1995, 18). According to affordable housing architect Sam Davis, the fastest-growing segments of the population are currently unmarried people – now 30 percent of all households (many with children) – and an increasing number of seniors (1995, 4). The population aged 65 and over is growing twice as fast as the general population and has already grown 22 percent between 1980 and 1990 with one in eight Americans in 1999 having reached old age (Treas and Torrecilha 1995, 47, 50).

Consequently, the turn of the twenty-first century is bringing with it a paradigm shift in the meaning of “the family household” – and how to affordably provide shelter for the new forms of households that are emerging. Davis (1995) states that “if there is a single, overriding objective for the architect of affordable housing, it is to make a dignified dwelling” (107). Central to human dignity, he proposes, are choice over one’s dwelling, how well it fits with the occupant’s living patterns and how well it can adapt to changing needs over time.

The case studies in this report illustrate that squaring dignity with affordability does not necessarily spell sturdy but faceless “cookie-cutter” housing projects. According to Davis, the challenge is to effect a shift in how affordable housing is conceptualized. “The real question for the design of affordable housing is not how much we can reduce costs; we know we can make cheaper housing. Instead we need to ask what we are getting for the money we spend” (1995, 81).

Housing that improves the value of its neighborhood and enhances the lives of its occupants (rather than warehousing them) is a collaborative investment, rather than a monolithic spending requirement. When housing is thoughtfully (but not extravagantly) designed, it does not “cost” money so much as it attracts investments (both monetary and social).

Well-designed projects provide multiple reasons for financing agencies (lenders) to participate. The lender’s image is enhanced by being identified with handsome, well-conceived and executed projects. Projects that are attractive to residents are more stable and better risks. Projects that stabilize neighborhoods increase lending opportunities and strengthen the security of lenders’ other loans (1997, 3).

In the area of senior housing, Lakeland Wesley Village I and II are visionary designs that still attract residents from as far away as New York. Their “handicapped friendly” design, inexpensive services and provision of perennial indoor green space give their residents the chance to remain active into late life well before the Americans with Disabilities Act was passed. A variety of rent subsidies also makes the complex affordable to people with a wider range of physical needs, incomes and ages than in single-subsidy developments. However, a

better “fit” could have been accomplished with more input from the seniors, which might have resulted in a building easier to maneuver in and less costly to maintain.

To a large extent, Lakeview at Victoria Park took up where LWV I and II left off. Careful market studies and a knowledge of the changes inherent in the aging process led to a building that was much more fine-tuned to the needs of older people. Not only do residents have a wide range of amenities that increase their chances for active social participation, the facility has the capacity to add amenities as the physical needs of its residents increase. Nonetheless, while the rents may be very affordable for older people in suburban Waldorf, Maryland, it would be a challenge to replicate all of the amenities and services of Victoria Park in a low-income, highly rural area.

In the area of affordable housing for unaccompanied farmworkers and single mothers, design must focus not so much on extensive services and amenities, but on balancing affordability with quality. UMOS was able to combine a children’s facility and flexible housing for unaccompanied men through the use of mixed funds from USDA, HHS and the Department of Labor. HIP, Inc. demonstrated that attractive housing and inexpensive housing are not mutually exclusive, and that with some design sophistication and a “self-help” development approach, single-family homeownership can be brought within reach of single working people without sacrificing dignity.

Housing design, in the final analysis, does more than determine the physical shape of the buildings we live in. It also determines the amount of freedom and dignity that individuals – regardless of their family circumstances – bring to their daily lives and those of their community. Chambliss (1997) challenges the affordable housing industry to begin thinking outside the box, and learning “to focus state and local, public and private efforts on building neighborhoods, cities and communities – not just ‘deals.’ Each housing project has the potential to add value – to family, neighborhood, community, and to the state and local economy” (1).

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While popular images of rural life focus on the peace and quiet of the countryside, the absence of roads, buildings, and urban infrastructure can make life difficult for low-income residents. For people who live outside a “traditional” two-parent, single-family home – such as elderly people, persons with disabilities, unaccompanied male farmworkers, and single mothers – the problems of rural isolation and lack of resources are made all the more acute.

Commonly used models such as worker dormitories and nursing homes may have lower building costs and more simple designs; however, they have not always met the needs of the populations for which they have been targeted. Around the country, developers are now creating innovations in rural housing design that pay more attention to the specific needs of these groups while maintaining (or even increasing) design efficiency. This report examines four case studies of innovative rural designs for nontraditional households.

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