

**AFFORDABILITY ISSUES
IN PROGRAMMING
CONTINUING CARE RETIREMENT COMMUNITIES**

by
Neil A.R. Prashad

Bachelor of Environmental Studies
Honours Urban and Regional Planning
University of Waterloo, 1982

Submitted to the Department of Architecture in partial
fulfillment of the requirements of the Degrees of
Master of Science in Architecture Studies
and
Master of Science in Real Estate Development
at the
Massachusetts Institute of Technology

September 1987

© Neil A.R. Prashad 1987

The Author hereby grants to M.I.T.
permission to reproduce and to distribute publicly copies
of this thesis document in whole or in part.

Signature of the Author _____

Neil Prashad
Department of Architecture
August 7, 1987

Certified by _____

Sandra C. Howell
Associate Professor of Behavioral Science in Architecture
Thesis Supervisor

Accepted by _____

Julian Beinart
Chairman
Departmental Committee for Graduate Students

Accepted by _____

Michael Wheeler
Chairman
Interdepartmental Degree Program in Real Estate Development

MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

SEP 23 1987

**AFFORDABILITY ISSUES
IN PROGRAMMING
CONTINUING CARE RETIREMENT COMMUNITIES**

by
Neil A.R. Prashad

Submitted to the Department of Architecture in partial
fulfillment of the requirements for the degrees of
Master of Science in Architecture Studies and
Master of Science in Real Estate Development

ABSTRACT

Issues of affordability concern both providers and consumers of residential settings. In developing Continuing Care Retirement Communities, (CCRCs), it is critically important that the decisions made during the early planning or programming phase reflect a systematic understanding of affordability issues. If the programming process holds the most potential for addressing the affordability issue, then it is reasonable to assume that a thesis which analyses the project development process and outlines specific options, can be a valid support for the developer in making facility programming decisions.

Affordability issues extend beyond the usual calculation of market capabilities relative to initial sales. They concern appropriate estimation of the needs and expectations of potential users, and the relation of these to programming elements such as site selection, design, pricing, financing, and marketing of a CCRC.

Focusing on the programming process, this thesis examines each element in a detailed and systematic manner, grounding every assumption in a fundamental understanding of the elderly as consumer and user. As the thesis itself is not optimally useful as a programming tool, a computerized program called the Retirement Housing Consultant System, (RHCS), is developed to assist developers in the actual programming exercise. RHCS is a Lotus 1-2-3 model which systematically requests project-specific data inputs, and combines them into development and operating pro-formas.

This thesis is not a definitive solution, or exhaustive in its scope of affordability issues. It is an attempt to parallel the process of exploration developers go through during the initial stages of project development. As such, it entailed venturing into a number of dark alleys, motivated primarily by naive faith and gut instincts.

Thesis Supervisor: Sandra C. Howell, PhD., M.P.H.
Title : Associate Professor of Behavioral Science
in Architecture.

TABLE OF CONTENTS

**AFFORDABILITY ISSUES
IN PROGRAMMING
CONTINUING CARE RETIREMENT COMMUNITIES**

I. ACKNOWLEDGEMENTS	4
II. INTRODUCTION	5
III. CHAPTER 1: PROGRAMMING CCRCs	16
IV. CHAPTER 2: UNDERSTANDING THE USER	26
2.1 - Demographic Analysis	28
2.1.1 - Population Growth Characteristics.....	28
2.1.2 - Retirement Trends and Labor Force Participation	30
2.1.3 - Health Status and Health Care Utilization	30
2.1.4 - Economic Status: Income, Equity and Investments	32
2.2 - Typology of the CCRC-eligible Market	35
2.2.1 - Wants and Needs	36
2.2.2 - CCRC Resident Profile	39
2.2.3 - Resident Affordability Concerns	43
V. CHAPTER 3 : SITE SELECTION FOR CCRCs	49
3.1 - Project Size	51
3.2 - Site Acreage	53

3.3 - Regulation	54
3.4 - Topography	58
3.5 - Neighborhood Context	60
3.6 - Land Tenure and Potential Room for Expansion	64
VI. CHAPTER 4 : DEVELOPMENT ISSUES IN CCRCs	67
4.1 - Type of CCRC	69
4.2 - Facility Size	73
4.3 - Unit Mix	74
4.4 - Amenities	77
4.5 - Design Issues	79
4.6 - Overview of Financing Options	83
4.6.1 - Conventional Financing ...	85
4.6.2 - Zero Coupon Mortgages	87
4.6.3 - High-Yield Income Bonds ..	88
4.6.4 - Participating Mortgages ..	89
4.6.5 - Tax-Exempt Bonds	89
4.6.6 - FHA Insured Mortgages	93
4.7 - Summary of Financing Options	94
VII. CHAPTER 5 : MARKETING AND PRICING ISSUES IN CCRCs	97
5.1 - Marketing Concerns in Developing CCRCs	97
5.2 - Pricing Issues	106
5.2.1 - Endowment Fees	110
5.2.2 - Monthly Maintenance Fees	112
VIII. CHAPTER 6 : THE RETIREMENT HOUSING CONSULTANT SYSTEM: A TOOL FOR PROGRAMMING CCRCs	115
IX. CHAPTER 7 : SUMMARY AND CONCLUSIONS	112
X. APPENDIX 1	128
XI. APPENDIX 2	148
XIII. BIBLIOGRAPHY	165

ACKNOWLEDGEMENTS

Though this is the second time I have written a thesis on the subject of housing for the elderly, I realize there is so much more to know.

I am thankful to my parents for believing in me and providing the necessary support to get me through the past two years.

Many individuals have contributed to this thesis, and I am grateful for their input. In particular, I would like to thank Sandra Howell for her advice and patience while I raced through a very hectic year; I have learned more about CCRCs from my reader, Bob Chellis, who is the "expert" in this business; Rolf Kallenbach and Juan Carlos Loveluck were not only good buddies, but provided valuable assistance with the computer model and editing; finally, Dany Comeau for being my best friend.

Thanks to the Canada Mortgage and Housing Corporation, I was able to finance a large part of my education at MIT.

INTRODUCTION

Retirement housing is a \$2.5 billion industry growing at a rate of about 15% - 20% per year, and it is going to get even bigger. One estimate claims that during the rest of this decade developers and non-profit organizations will spend over \$33 billion to create some 1,800 retirement communities, housing an average of 300 residents each (Schneider, 1987).

There is a myriad of responses to the need for specialized shelter and health care facilities for an aging population, and the future is expected to hold a continued proliferation of options. Not surprising therefore is the connection between this multitude of options, with the highly segmented over 65 age population that can no longer be considered to have homogenous "needs" and "wants" in terms of shelter and care facilities.

Differences between types of products available are distinguished primarily by the range and level of services provided in the particular setting. As a consequence, facilities generally range from independent living

arrangements, sometimes dangerously oversimplified and referred to as "go go" settings because they cater to the younger elderly, to more supportive congregate living situations for the "slow go" elderly, and eventually the nursing homes for the "no go" group. The manner in which the package of available services is delivered and paid for further blurs an increasingly complicated marketplace, and creates confusion about names, typologies, and precise kind of care available in a particular project.

Some clarification of what is meant by Continuing Care Retirement Community or CCRC is needed. As the name implies, a CCRC offers a continuum of care which allows elderly people the opportunity to age in place, not having to move to another location as their health status fluctuates and their health care needs change. Typically, the continuum includes independent housing, personal or assisted living opportunities, nursing home care, as well as a broad range of supportive social and recreational services. A major dining facility is also included and residents will normally eat at least one meal per day in this group setting.

Congregate housing arrangements, sometimes called Adult Congregate Living Facilities, or ACLFs, are often confused with CCRCs. The key distinction is fact that CCRCs offer skilled nursing care as a readily available service whereas ACLFs do not.

In 1984 there were about 275 Continuing Care Retirement Communities in the United States housing some 90,000 elderly individuals, (average age about 80), living independently in their own apartments but with opportunities for eating together, group recreation, and other activities that come from being part of an organized community (Winklevoss and Powell, 1984). More importantly however, the members of these communities pay an up-front lump sum and a monthly maintenance fee to secure a virtual guarantee that, whenever necessary, they can receive personal care or assistance while still living in their unit, and as their health fails even further, also have access to a health care facility, generally a nursing home designated as a Skilled Nursing Facility, (SNF), and/or Intermediate Care Facility, (ICF). When the resident is admitted to a nursing bed, monthly maintenance costs rise little or not at all for a pre-agreed number of days per year. Subsequently longer stays are frequently billed at prevailing market rates for care in that nursing facility.

In CCRCs, contractual arrangements for health care are often negotiable, sometimes annually. When this unique feature of a continuum of care is packaged as a "life-long care guarantee" for a particular price, with no pre-set limits on length of stay in a nursing facility, it is termed a "Life-Care Community". In order to avoid confusion,

therefore, it is necessary to establish the method of payment for what package of services, and for how long, in order to differentiate types of retirement communities.

The grouping of a "continuum" of services on one site, and the assured health care component of such facilities are the primary distinguishing features of CCRC's compared to other retirement settings. CCRCs provide availability of care and varying levels of insurance against the cost of long term care, and supplement coverage of acute health care costs paid for largely by Medicare and private insurance. What really makes them unique however, is that they provide this insurance in combination with the independent living arrangements that the resident can enjoy as long as his or her health allows (Winklevoss and Powell, 1984).

For the elderly individual, a CCRC offers the convenience of one-stop shopping for their current and future shelter and health care needs. In comparison to continuing to live in their own home, the fear of someday being a burden to friends and relatives is effectively removed, as is the concern of eventually having to enter an unfamiliar nursing home with its attendant daunting financial and psychological concerns.

CCRCs evolved as an alternative for a population concerned that as they became older and more frail they wouldn't have

someone to care for them, or a way to pay for that care. Since Medicaid eligibility requires that the elderly person be spent-down to be declared financially indigent, it is generally not an attractive option. The desire of elderly persons to maintain financial dignity should contribute to the growth of the CCRC industry.

Based on their mix of housing and health care facilities, CCRCs cater to two distinct elderly populations: the 80 year olds who are more ambulatory, and those who require a more supportive health care living arrangement (Powell and McMurtrie, 1986). This "old old" segment of the elderly population just happens to be the fastest growing segment of the over 65 population - which itself is the most rapidly increasing group of the entire population, both in real numbers and as a percentage of the whole. It is hardly surprising that a study of the CCRC industry, completed by the Pension Research Council in 1984, illustrated that more than 40% of the surveyed facilities were opened during the 1970's (Winklevoss and Powell, 1984; Powell and McMurtrie, 1986). Currently serving less than 1% of those over 65 years old, the CCRC market in many areas is virtually untapped. Hence, it appears that the future demand for CCRCs can only increase.

As the ultimate product for those elderly persons wishing an active alternative to living independently, CCRCs provide the

services, social opportunities and security they need. For this reason, they are the subject of this thesis. As well, the independent living through to skilled nursing care characteristic of CCRCs encompasses the spectrum of shelter and health care facilities, and as such, allows this study to be broadly applied to other settings.

The word "afford" is defined in Webster's New Collegiate Dictionary as "to manage to bear the cost of without serious detriment.". This interpretation is consistent with the concern of this thesis in the sense that accessibility to a product like a Continuing Care Retirement Community hinges on the client's ability to cover expenses initially, and to continue to be able to afford it through the length of their stay in that facility. This is what the client and the developer see as affordability.

Charges for residency, (circa 1983), averaged \$35,000 per single, and \$39,000 per couple as an initial entry or donor fee, and about \$600 single and \$850 per couple per month in carrying costs, with periodic increases as needed to cover inflation and spiralling carrying costs, (Winklevoss, Powell 1984). Current Boston area projects average much higher entry fees, such as \$150,000 for a single person.

Unfortunately, these financial requirements prohibit the majority of persons over the age of 65 from access to many of the existing CCRCs, and new facilities are much more

expensive than old ones.

Consequently, it can be assumed that if entry fees and monthly charges were lower, CCRCs would be available to a wider income segment of the age-eligible elderly market. Consider this assumption in the context of the following statistics:

- a. The total elderly population is approximately 28 million while those being served by CCRCs is about 125,000.
- b. The potential market of age-eligible elderly, those over 80 years old are the fastest growing segment of a rapidly increasing population of over 65 year olds. This segment accounts for about 15 million of all the elderly.
- c. The income segment that is the primary target market for CCRCs are those individuals with at least \$20,000 net annual income. This income segment is 22% or about 6 million of all the 70 - 84 year olds.

(Sources: Rohrer and Bibb, 1986; U.S. Senate, 1987).

In order to deal with the problem of affordability in planning research for retirement housing must be systematically built into the project development process (Howell, 1982). Affordability requires widening the scope of issues in the project development and operating context. For the developer, affordability is thought of in terms of what can be built, and how it is going to be financed, marketed, and operated within the parameters of the clients' economic

capabilities. Implicitly, affordability for the developer is tied to the notion of project development and operating risks and how they can be mitigated, both in the short and long term.

The point at which the affordability concerns of the consumer meet the affordability concerns of the developer is pricing, and pricing is determined in the programming process. During the programming or planning process the developer and architect try to mesh the "needs" and "wants" of the consumers with the ability of a project to physically, psychologically and socially meet those expectations and be financially solvent. Whether it is acknowledged or termed as such, programming is actually carried out for all projects as it functions as a representation of comprehensive understanding of a problem and of the values which must be addressed in its solution (Agron and Moore, 1978).

For the most part, the programming process is not very systematic and hence under-emphasized; decisions are too often unilaterally taken in a context which lacks effective communication between developers, designers and consultants expert in issues relating to the elderly users.

Developers initially examine a market analysis of comparable facilities, along with age and income-eligible population characteristics in the local market area. This data is then

tempered by the regulatory constraints of what and how much can be built on the particular site. A comprehensive set of pro-formas or project financial summaries are generated after a series of iterations incorporating: site acquisition; project financing; construction and operating cost calculations; and potential revenue generation estimates.

This exercise actually determines what is planned, financed, marketed and built. But in an increasingly regulated and competitive industry, where shelter and health care facilities for the elderly are rapidly changing, where distinctions between products are getting more and more blurry, and where the elderly population as a market is better informed, more discerning and require more comprehensive analysis. There is a need for a more systematic approach to the programming process. An approach which incorporates a wider range of issues relating to "affordability" will ensure that the critical factors of developer and client economic concerns are addressed, and hence give the project a strengthened opportunity for initial and long term success, as well as reach a much larger market.

Understanding CCRC affordability means understanding the range of options possible when making decisions about aspects of CCRC development or operation. The longer term implications of each option are equally important and must be fully understood in the context of the life-cycle of the

project when trade-offs are being made. As not every developer is knowledgeable or skilled enough at CCRC programming, supports are key ingredients for success. Generally, consultants and new data fill the gaps when in unfamiliar territory.

This gap in knowledge is the rationale for creating a resource or tool which can aid developers in planning a CCRC. The tool is called the RETIREMENT HOUSING CONSULTANT SYSTEM, (RHCS). RHCS systematically presents key options specifically identified as critical in the programming process. The system defines the range of inputs to CCRC planning and these inputs are then specifically assigned to generate development and operating pro-formas for the project. Presented as software for use in conjunction with Lotus 1-2-3, it serves as a "consultant system" because it takes the responsibility for knowing the elements of affordability in developing a CCRC.

This "consultant system" allows more accurate and systematic assessment of options in programming a CCRC. New information can be readily added as experience allows, therefore contributing to its flexibility and continued utility.

Feasibility for development of an affordable CCRC boils down to one or a combination of the following contingencies:

- partial subsidies, land donations, or tax incentives to developers, lenders, private

investors, or consumers by public agencies at the local, State or Federal levels;

- acceptance of a reduced profit by the private sector for provision of a socially necessary product; and
- the advent of long term care insurance to defray the high risks associated with guaranteeing health care.

All of these contingencies are possible and are, in one way or another, in process at the time of this writing. In the meantime, if and when the contingencies are met, systematic programming of the CCRC development process will further assume both affordability and reasonable assured gain. It then remains up to developers and sponsors to find solutions from within the system as it is.

CHAPTER 1 :
PROGRAMMING FOR CCRCs

Facility programming is an analytical, rational and disciplined process which seeks to represent a comprehensive understanding of a development situation and of the values that must be addressed in that project (Agron and Moore, 1978; Tusler, Schraishuhn and Meyer, 1985).

Programming is advanced thinking as a basis for doing, and, as such, is a tool to be used in determining desirable ends before becoming too preoccupied with the means. (Gelwicks, 1975; Gelwicks and Dwight, 1982). In the same sense, programming does not focus entirely on defining a particular problem, it can also serve as a vehicle to explore the realm of the user, and to form a basic structure for a relationship between the architect and the developer (Hersberger, 1985).

In examining the total process of developing and operating a CCRC, facility programming should begin shortly after a

preliminary research phase supports a decision to commit major financial and other resources to a project. The chart below summarizes the total development process which parallels the development of a CCRC. It should be noted that this process is not linear. Instead, many steps occur simultaneously and in a looping, iterative manner.

PROJECT DEVELOPMENT OUTLINE

1. Organization Phase

- * Establish an organization, controls, and staff;
- * Develop mission and focus statements which can begin to sketch a strategic plan;
- * Project scheduling - what is to be done, by whom and when.

2. Research Phase

- * Area analysis - the state, regional, local and neighborhood characteristics which will affect the scope and character of the project;
- * Market feasibility - use of secondary data to show potential market and its ability to pay, as well as current and future competition. Data should include population characteristics, service need indicators, and comparables;
- * Market survey - use of primary data to confirm feasibility and determine exactly what the consumer wants, may include telephone, mail or face to face surveys and focus groups.

3. Project Design Phase

- * Operations Program - who will be served, what, where, by whom and how;
- * Planning and design directives - written instructions which the developer gives to the architect;
- * Space program for construction - a list of spaces, Space Relationship Diagrams, unit mix by type and size, and initial schematic studies.
- * Additional research, (involving primary or secondary data collection), may be necessary if

programming iterations reveal such a need.

4. *Financial Analysis*

- * Proformas - project development, operations, sources and uses of funds, cash flow and measures of financial return, and actuarials.

5. *Environmental Impact*

- * Impact of project on neighborhood and environs, usually required by local and/or State regulators.

6. *Development Plan*

- * An action plan to implement the project, secure financing, and obtain Certificate of Need and other building permits.

7. *Marketing Program*

- * Formation of "Tactical Action Team" to establish promotional strategy and staff a sales office;
- * Implementation of direct mail and other advertising programs.

8. *Schematic Design Phase*

- * Detailed space program;
- * Schematic drawings;
- * Cost estimating.

9. *Design Development Phase*

- * Preliminary Drawings and specifications;
- * Cost estimating.

10. *Construction Document Phase*

- * Working drawings and specifications;
- * Final estimates - let bids or negotiate contract

(Adapted from Gerontological Planning Associates, 1975)

Programming occurs at different levels of depth and function within the context of a particular situation for different time frames in a project cycle. For example, the most

typically recognized program is a detailed "space program" produced by the architect to incorporate the goals of the developer and the needs of the users into detailed square footage and accessory requirements. Other key programs are for marketing and facility management. However, these programs are not absolute in themselves; each is a product of a comprehensive attempt at understanding the issues and concerns in the particular situation, and each has a systematic connection to any preceding or following programs.

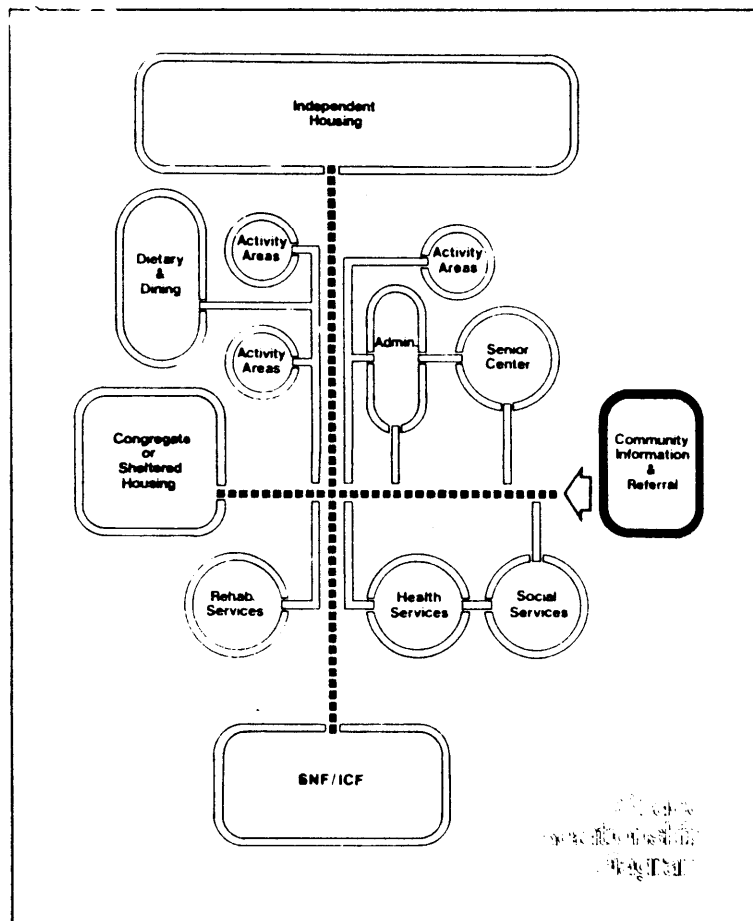
Programming for retirement housing involving a health care facility is a complex, analytical and multi-disciplinary process directed to a single end -- which is a viable method of satisfying user needs within physical and financial feasibility and governing regulations. The most important programming exercise begins when the project is initially conceptualized. At this point, issues of affordability can be best and most logically tested because many of the key decisions and assumptions, which may later prohibit the use of potential options, have not yet been made. A program requires definition of the problem and development of integrated functional, environmental, and operational solutions which best mesh with the developer's or non-profit sponsor's philosophy and other constraints (Agron and Moore, 1978). In developing a CCRC, there is a definable hierarchy that impacts on the programming process. There are state and

local regulations, standards and approval processes to negotiate, there are community organizations and agencies at all levels which must be given consideration and responsibility for input, and of course there may be internal hierarchies among the development team.

Defining goals is the most important process in programming. Having to conceptualize and clearly identify goals of the venture is a critical element for success in meeting the needs of the user, and in improving the quality of communication between developers and architects. The clearer the definitions of the developer's goals are, the farther along architects are toward achieving them (Gelwicks, 1975). In most instances, space plans do not to tell how spaces interrelate or how the total living environment should function for the users. This requires a synthesizing process where developers and architects define and understand who the users are and what they "need" and "want" from their environment. For example, space relationship diagrams are an excellent communications tool for the developer and architect in understanding and agreeing on the proper relationships between the functions on the site and within the building.

In this exercise, the developer needs to fully understand the functional relationships between the services and activities planned for the facility and the physical implications of

those elements. Though apparently simple, space relationship diagrams demonstrate a systematic level of forethought where developers can help to clarify key issues and avoid needless and expensive misunderstandings and changes at a later date (Gelwicks 1975). Figure 1.1 is an example of a space relationship diagram for a hypothetical CCRC.



There are two rationales for making this exercise an integral part of the programming phase: First, it brings the key decision-making parties together at an early stage in the project development cycle and establishes a precedent for interpersonal communication; Secondly, developers,

particularly those who are inexperienced at this type of development, can use this process as a mechanism to enable them to recognize that they are dealing with a complex network of social, psychological and physical interactions that comprise an elderly person's living environment. For instance, in space planning for one New England CCRC, an auditorium was not designed for alternate non-theatre uses, nor did its location within the building allow for possible outside community use, (a potential of both social and economic importance to management). Yet another example is when locations of laundry facilities for residents must be based on considerations of the social attributes and physical barriers of the CCRC circulation system. Elderly people cannot carry laundry very far, nor would they wish to cross a major formal lobby or dining area edge with such bundles (Howell, 1987).

The two main concerns of a CCRC facility program are the Independent Living Units, (ILUs), and the Skilled Nursing Facility, (SNF). These are very separate design and service entities, but they must be understood in tandem for the entire project to function as the "community" which its name implies. Unfortunately there are as yet no firm rules for decisions on space relations and considerable controversy over some. For example, there is no consensus on proximity or adjacencies of the SNF to the ILUs. During the programming process such controversies must be encouraged,

and long term implications for management and residents assessed.

The critical elements of a facility program are a building's physical "characteristics", and its "contents," which are supposed to functionally meet its pre-determined service expectation (Agron and Moore, 1978). Establishing the parameters for building characteristics involves addressing issues like site, community and institutional regulatory and other concerns, neighborhood physical context, building performance and adaptability, and initial and life-cycle costs. For development of a new nursing facility, a Certificate of Need is to be obtained, and there are health and safety codes and standards which will govern much of how the building is constructed. Similar code restrictions are not as stringent for the Independent Living Units, but design and construction guidelines do exist in a format applicable for creation of a barrier-free living environment, and are highly recommended. Zoning may be the main hurdle here as CCRCs are a new development type, and may not be recognized in local planning regulations.

Although development of health care facilities is a complex process, it should be stressed that in the final analysis, the facility remains a place where the ailing are cared for by staff. The close and highly personal inter-relationship between patient and staff makes all parties interdependent;

therefore the major measure of success in planning of a facility should be the degree to which the dignity of the patient, family members and staff have been preserved (Tusler, Scraishuhn and Meyer, 1985). For instance, the dining and common rooms should not have visual connections to corridors or rooms which are used for medical examinations and therapy.

A fundamental problem of facility programming is that decisions are frequently made without the benefit of input from those who are expected to manage and operate the facility. If a management organization is not yet identified, as is often the case, then an experienced management consultant who is familiar with geriatric facilities should be employed for input in programming. Hence, it is critical that information for a facility program be derived from the service plan developed by those solely concerned with facility management. A service plan underpins the functional relationship between user and staff, whether the program is for an health facility, assisted care units or independent living apartments.

Given the preceding background notions about programming, it becomes relevant to outline how issues of affordability can be incorporated in a systematic and logical manner during the planning phase of the total project development cycle. The contention here is that if a developer understands that there

is an order to follow in planning a facility, then that order is known as programming. Programming attempts to conceptualize the key issues of user needs in terms of physical requirements and service package expectations, and facility development and operating concerns of the provider(s). If this rationale is accepted, it may be further argued that the programming process holds the key to understanding affordability issues in continuing care retirement communities. This is where the Retirement Housing Consultant System is an especially valuable tool. RHCS capsulizes the programming stage, thereby allowing options for key questions to be considered in an easy and systematic order.

CHAPTER 2:
UNDERSTANDING THE USER

There is no disputing that America is growing older. This phenomenon is the single most significant demographic fact affecting the current and future course of the country (U.S. Senate, 1987). The proportion and real numbers of persons who are 65 years and older has grown, and will continue to grow, at a more significant rate than any other age group. As a consequence, in examining products like Continuing Care Retirement Communities that are intended for exclusive use by this particular age group, it is necessary that a thorough demographic description be undertaken. Nevertheless, demographics should mean more than body counts.

Demographics do not usually entail analysis of financial capabilities or intentions of the population being studied. However, in this case it must since this really is the crux of affordability issue. In programming a CCRC, it is absolutely critical that the developer and all involved understand who the elderly are, what their social and economic characteristics are, and how they are changing in order to be able to provide a product that physically,

socially and economically meet the market.

Market analyses and similar demographically oriented studies by specialists and consultants are frequently commissioned by developers at the initial stages of project development. The primary purpose of these studies is to determine whether there exists a market for a CCRC and how deep that market is. Market studies need to be founded on, and are intended to supplement, understanding the "needs" and "wants" of the older people in a particular local market. In tandem, a thorough demographic analysis with conservative extrapolation and interpretation factors, combined with a focused community survey which assesses the extent and nature of interest in CCRCs, are good insurance against the probability of making bad decisions during the programming stage. Survey questions should be specific about costs of various alternatives.

The demographic data in the following summary is principally derived from a Report by the Special Committee on Aging presented to the 100th Congress of the United States (1987). Other qualitative information on the typology of the CCRC resident is paraphrased from primary data collected through surveys by the Foundation for Aging Research (Parr, Green and Behncke, 1986), and the American Retirement Corporation (Rohrer and Bibb, 1986). This summary is a quick overview of the most significant findings in their study of developments in aging, and does not profess to be exhaustive or the final

word on demographics or on typologies of retirees. In specific project developments, state, regional and local demographic data would need to be collected and analysed to establish the similarities and differences from the national picture. As well, independent in-person, telephone or mailed surveys and focus group exercises supervised by qualified professionals should be commissioned to ascertain local market profiles, preferences, and intentions.

Beyond these preparations, it needs to be cautioned that the elderly, as a consumer entity, are evolving and thus their expectations and intentions are also changing. This implies that survey questions and demographic data need to adapt and be kept current or they can easily deceive. To illustrate this point, consider the differences in expectations and intentions between your grandparents, your parents and yourself in a hypothetical CCRC environment.

2.1. DEMOGRAPHIC ANALYSIS

2.1.1. Population Growth Characteristics

The following summarizes the most salient population growth factors likely to affect the business of developing and operating Continuing Care Retirement Communities:

- In 1900, one in twenty-five Americans was age 65

and over; by 1985, One in nine was at least 65 years old.

- The size of the over 65 population grew twice as fast as the rest of the population in the last two decades. The "very old" population, those over 85 years old, is expected to expand by at least seven times by the middle of the next century. This is the segment of the elderly population which should be most interested in the security and levels of service offered by CCRCs.

- In 1985, 40% of the elderly was age 75 and over; by the year 2000, this percentage will increase to 50% (and about 15% of that percentage will over 85 years old).

- Elderly women now outnumber elderly men three to two, and this disparity is even greater at age 85 and older when there are only 40 men for every 100 women. Similarly, in CCRCs women outnumber men.

- Life expectancy for people born today is 27 years longer than those who were born in 1900. In 1985, life expectancy at birth for women was 78.4 years and for men it was 71.3 years. CCRC operators need to keep abreast of continuing longevity trends as they will make previously assumed turnover rates less actuarially sound for future predictions.

- Over half of the elderly live in 8 States: California, New York, Florida, Pennsylvania, Texas, Illinois, Ohio, and Michigan. Coincidentally, these states have the most CCRCs.

- In 1980, for the first time ever, more elderly lived in suburbia than downtowns.

- "Counter migration" is an emergent trend whereby some elderly who retired to the Sun Belt are returning home to be closer to friends and family. (Questions need to be asked whether these people are older, more frail and perhaps even more spent down, as some have suggested). If there is some credence to the notion of moving closer to friends and family, then there may be some implication for CCRC site selections in more suburban areas where adult children likely live, and where most of the elderly themselves are from (above).

2.1.2. Retirement Trends and Labor Force Participation

- Retirement is occurring earlier and is of longer duration than ever before. In the past 80 years, the average male increased the amount of time spent in retirement to 13.8 years - from 3% in 1900 to 20% in 1980. This increase naturally coincided with the early retirement trend where some two-thirds of the elderly retired before age 65. This trend may increase the future need for more active leisure oriented CCRCs, however it is cautioned that the younger elderly may not yet be interested in a CCRC-type of setting.
- Among the elderly, labor force participation drops rapidly with increasing age. In 1986 for instance, 45% of the men age 62 - 64 were in the labor force, compared to 25% of those age 65 - 69, and 10% of those 70 and older. Though not currently a big factor, in the future there will be significantly greater numbers of working couples and female retirees, who will likely have better retirement incomes because of pension plans and other investments. As such, income and equity profiles of CCRC-eligible elderly will evolve, and women will be the most impacted.

2.1.3. Health Status and Health Care Utilization

Among the many differences between a younger and older person, health status may be the largest single determinant of an individual's need for environmental support and service requirements. This is especially true in the development of shelter and health care facilities. Fundamentals of health status and care utilization by the elderly need to be grasped in order to effectively plan, market and operate a CCRC.

- Contrary to stereotype, most older persons view their health positively. Even if they are chronically ill, two out of three elderly describe their health as good or excellent compared to others their own age. This factor is very

important in marketing a medically oriented CCRC.

- Income is directly related to an older person's perception of their health. About 25% of those with incomes above \$20,000 described their health as excellent compared to only 12% of those of the same age who were of incomes less than \$10,000. As the lowest income elderly are not the real target of "affordability" in this thesis, the perception of health status for those in the middle and upper-middle income category is noteworthy for marketing a CCRC.
- Some 80% of all the elderly have at least some sort of mild disability or chronic condition typically related to arthritis, hypertensive disease, heart conditions, and hearing impairments. One out of every five elderly persons have some degree of activity limiting disability, while only a small proportion are severely disabled. The chance of being severely limited increases with age for each group of elderly; for example, some 60% of the oldest old, (over 85 years of age), are limited to some degree in daily activities.
- Instead of an acute condition, the possibility of becoming hospitalized because of a chronic disease or being disabled increases significantly with age. Severe chronic illness can prevent individuals from functioning independently, increasing the need for long term care services which can be provided in a Continuing Care Retirement Community. In 1985, it was estimated that 5.2 million persons 65 years or older are expected to need special care and assistance in remaining independent. This figure is going to reach 7.2 million by 2020 and 14.4 million by 2050; increases of 38% and 177%, respectively.
- Three out of every four elderly die from heart disease, cancer or stroke. Though heart disease has been declining over the past few years, it still remains the major cause of death today.
- Death rates for the elderly have been improving steadily over the past four decades, reaching an all time low in 1983, and this trend can be expected to continue in the future. CCRC operators must keep up with future decreases and adjust their mortality expectations accordingly.
- The elderly are the heaviest users of health services; they are hospitalized twice as often as

the younger population, stay twice as long, and use twice as many prescription drugs. Again, the implications for utilization of a health facility cannot be underestimated.

As most health facilities in CCRCs are "open" to the local market as well, the following patterns of use by the elderly as a whole are important to the viability of the SNF:

- Only about 5% of the elderly are in nursing homes at any given time; however, some 20% of all the elderly will have spent some time in a nursing home during their lifetime. Nursing home populations are expected to continue to rise steadily in the near and distant future; financial assistance programs like Medicaid and Medicare assist the utilization of nursing homes. - Almost two-thirds of all personal health care expenditures attributed to the elderly are expended by governments; this equates to about \$2,823 of \$4,202 per capita spent in 1984. 20% of all expenditures were for nursing homes, about \$880 per capita in 1984.
- Direct out-of-pocket health costs for the elderly averaged 15% of their income in 1984, an average of \$1,059 per person which covered 25% of their total health care needs.
- Out-of-pocket health related expenditures by the elderly were spent in the following manner: 42% on nursing homes; 31% on other care; 21% on physicians; and 6% on hospitals.
- As expected, nearly 70% of Medicare expenditures go to hospitals, and nearly the same percentage to nursing homes for Medicaid. Only 1% of all Medicare dollars are spent on nursing homes, while 17% of Medicaid dollars are spent in hospitals.

2.1.4. Economic Status: Income, Equity and Investments

Addressing the notion of affordability is not complete without a summary of the economic status of the users. The

following points capsulize some of the more salient issues concerning the economic status of the CCRC-eligible elderly.

- Older people have substantially less cash income than those under 65 years old, (about 63% less if family incomes are compared and about 47% if individual incomes are compared). Median cash incomes for individuals over 65 was \$7,476 in 1985 compared to \$16,064 for those between 25 and 64 years old. However, the elderly have significant non-cash resources which, if liquified, would allow them to approximate the economic status of the under 65 age group.
- The elderly are only slightly more likely to be poor than other adults - in 1985 for example, 12.6% of the the elderly were below the poverty level compared to 11.3% for those younger than 65 years old. While this is still a significant level of poverty, and a greater proportion of the elderly are likely to live near poverty, it is important to note that the elderly are not drastically worse off than the rest of the population.
- Intra-cohort poverty segmentation among those over 65 illustrates that the oldest old have the lowest money incomes and more likely to be below the poverty line. In 1985 some 19% of those over the age of 85 were below the poverty level compared to 10.6% of those between 65 and 84 years old. In addition, median cash income for couples aged 85 and older was \$15,111 which was less than three-quarters of the median cash income of those between the ages of 65 and 74 (\$20,354). The median income for single persons over the age of 85 was \$6,400, about 78% of the \$8,160 income for single individuals aged 65 to 74.
- Older women have less money than older men; in 1985, the median income of elderly women was \$6,166 or 57% that of elderly men (\$10,800). While women accounted for about 60% of the elderly population in 1985, they were nearly three-quarters of the elderly poor. Reform of existing Social Security laws affecting widows, combined with currently larger workforce participation by women, will increase their median income in the forseeable future.
- The elderly rely heavily on Social Security

benefits and asset income. In 1984, 38% of all income from all age units was from Social Security and 28% came from asset income; 16% were from earnings and 15% from pensions.

- The elderly have greater assets than the non-elderly since they have accumulated them over a lifetime. More than one third of their asset base is related to equity in their homes. Although a high percentage of the elderly own their homes mortgage-free, the cost of maintaining them has been rapidly rising over the past decade. Property taxes, utilities, and other maintenance costs account for some 35% of the elderly homeowner's income. In the endowment model of a CCRC, home equity conversion by residents is crucial to affordability. However, this cannot be assumed to be an automatic decision as the elderly often view their home as a hedge, against which they can borrow in a medical emergency.
- The median net worth of an elderly household, (age 65 and over), in 1984 was \$60,266 compared to an average of \$32,677 for all households including the elderly. It is particularly interesting to note that the group with the highest net worth is the 55 - 64 age group which averaged \$73,664, and which will be the CCRC-eligible market in the next 20 years. However, these figures include home equity and when controlled for this factor, median net worth drops to \$18,790 for those age 65 and over. As well, the data is nationally based and will vary greatly in both directions depending on the local real estate market.
- Excluding home equity, many of the elderly have few assets which are likely to be in the form of interest-earning assets at financial institutions such as savings, checking or money market accounts.
- In terms of consumption patterns, the economic well being of the elderly is reflected in the kinds of expenditures they make and the percentage of their total budget expended on those items. In general, the elderly consume fewer goods than the non-elderly and spend more of their budget on the essentials: shelter, utilities, food and health care expenditures for the non-elderly account for 50% while the 65 to 74 age group spend 57% and the 75 plus expend 66%. It is valuable to note that the "young old," those in the 65 to 74 age group, spend the highest percentage of their income on entertainment of all age groups, (6.6%), while the

"old old," those 75 and over, spend more on health care than all other population age groups, (13.3%). Though not wholly unexpected, these findings reinforce the expectations developers should have in correctly targeting a CCRC.

2.2. TYPOLOGY OF THE CCRC-ELIGIBLE MARKET

Programming a CCRC should begin and end with a correlation of the facility with the "needs" and "wants" of the users. It is important that the distinction between "need" and "want" be further unraveled in order to comprehend the basis for consumer satisfaction (Wolfe, 1987 unpublished).

Whether or not a consumer has a need for a particular product, purchase will be based on desire. When desire comes into play, the consumer then acts according to perception of value of that product -- expectations in terms of the self. The purchase of a product based solely on need is non-discretionary, while discretionary purchases are based on desire alone, without actual need. There is a big difference in the way a consumer will approach and measure the value of a discretionary purchase vs. a non-discretionary investment.

The distinction in these two decision-making processes is hinged on expectations of the product in the consumer's mind. Non-discretionary purchases, "needs," are judged

more in functional performance terms. On the other hand, "wants" or discretionary purchases are harder to justify and thus must satisfy a more complex set of expectations which David Wolfe, founder of the National Association of senior Living Industries, claims are related to an individual's "life satisfaction." An individual's "life satisfaction" is tied to his or her values, and the unique service, functional performance, social acceptance, and life-enhancing expectations of the purchase (Wolfe 1987; Golant 1985).

This concept may hold some promise in developing successful marketing strategies and activities which appeal directly to a consumer's "life satisfaction" experiences, but it presently serves as a valuable concept to bind together the somewhat convoluted process of consumer behavior.

The preceding summary should have outlined the characteristics of the population. This section is intended to understand some of their "needs" and "wants." It is based on surveyed data from three reputable research firms.

2.2.1. Wants and Needs

What people "want" is largely a function of what is actually available, and what they know about the available options.

In other words, the elderly may not be familiar with CCRCs and as a result will not consider them an option; in consequence, market potential may depend on education and promotion. This is especially true of those retirement markets which are relatively underbuilt. However, the population as a whole is getting more and more sophisticated in response to the proliferation of local options for retirement housing. This emergent trend in consumer awareness will make it more and more difficult for the developer to know what or how much to build, or how to price, market and operate shelter and care facilities.

The CCRC market is "need" driven but the population is not necessarily aware of the "need." The potential population for CCRCs encompasses those 80 years and older. This is the most rapidly expanding segment of the over 65 population, and thus it is easily assumed that the market is omnipresent. Not so. In fact senior industry officials have been warning overzealous developers to carefully consider that while the CCRC package provides prepared meals, tray service, health care, associated social and recreational amenities only a minority of the total 65 plus population currently require these services (Rohrer and Bibb, 1986; Soldo and Manton, 1986; Branch and Jette, 1983).

In the group of persons between the ages of 65 and 74,

fully 60% of them have no apparent current need for a package of services that includes health care which is what CCRCs offer (Rohrer and Bibb 1986). Of those over the age of 75, about 80% of them have some health related problems, but individuals in this age group overwhelmingly think of themselves as being active, quite alert, and in relatively good health. This is especially true of the more wealthy elderly (U.S. Senate 1987). The consequence is that those responsible for marketing a CCRC must contend with a population that may physically and socially benefit from being in a CCRC, but which sees themselves as younger, healthier or preferring to remain in their own homes, and thus willing to wait to make a decision. Still others have options like moving to a second or vacation home, or even moving to be closer to adult children. These elderly see the CCRC as a discretionary decision or last resort option that may satisfy an unwanted need, but not their desire (Wolfe, 1987 unpublished).

Individual health status is often cited as a primary determinant in the decision to move to a medically oriented CCRC. When they do move to a CCRC, failing health of an individual or spouse and the prospect of readily available health care for the rest of their lives are the dominant reasons. Facility location, safety and security are the factors mentioned next most often in surveys. Again, this is a conundrum for the developer. For a CCRC to operate

successfully in the short and long runs, the entrants must be predominantly healthy or they may over-utilize the nursing facility. Typically, the SNF depends on actuarially determined mortality and morbidity rates, which are intended to strengthen the risk-pooling aspect where the majority of the residents are low risk, low health care users.

Some industry experts disagree with the characterization of CCRC residents as having failing health, claiming that research indicates the residents to be healthy individuals, most of whom do not need personal assistance or extensive health care but want to make sure it is available in the future. Either way, it is important to recognize the importance of perceived and actual health status in marketing a CCRC.

2.2.2. CCRC Resident Profile

The market segment for CCRCs is decidedly narrow. Those who move into CCRCs are 82 years old on average and 66% of the prospect pool in a market can be assumed to be between the ages of 74 and 82. The ability of CCRCs to attract individuals younger is limited because of the reasons outlined above. Beyond 83 years old, the market contracts dramatically due to the onset of serious health problems which imply more of a need for long term care and not

independent living units. A recommendation for realistic penetration expectations and unit absorption forecasts is to stratify the true local market into the following percentages (Rohrer and Bibb, 1986):

- 20% between ages 70 to 74;
- 65% between ages 75 to 83; and
- 15% older than 83 years old.

As females have made up nearly 80% of the CCRC resident population, marketing appears to have appealed most to single females, who constitute about 64% of new entrants, compared to 23% married couples. A scant 13% are single males. These statistics may prove fallacious for future marketing of more for-profit oriented CCRCs because they are primarily based on the earlier non-profit sponsored facilities. For instance, future marketing may need to capture more married couples, and two female households.

Combining what we know about age stratification, sex and marital status of CCRC entrants, it can be anticipated that new entrants will have the following profile:

Age/Sex/Marital Status Percent of new entrants

Married couples, 70 - 74	4.6%
Single females, 70 - 74	12.9%
Single males, 70 - 74	2.5%

Subtotal	20%

Married couples, 75 plus	18.4%
Single females, 75 plus	51.4%
Single males, 75 plus	10.2%

Subtotal	80%

(Source Rohrer and Bibb, 1986)

In the 1990's and beyond further changes to this profile can be expected, especially if considering the middle to upper-middle income market segment. For example, using figures comparable to the Metropolitan Boston area, the following population characteristics may be prevalent in the next wave of CCRCs:

- 65% of all residents will be single, widowed or divorced women. 35% of them will be between the ages of 74 and 80 years old; 50% between 80 and 85 years old; and 15% over 85 years of age. Their net annual incomes will range from \$15,500 to \$35,000 and most will have between \$80,000 and \$300,000 in stored equity.

- 24% of all residents will be couples. 70% will be between 74 and 80 years old; 25% aged between 80 and 85; and 5% over 85 years old. Their net annual incomes will be from \$25,000 to \$35,000 with equity ranging from \$100,000 to \$300,000.

- 8% of all residents will be two female households. These could be mother and daughter, or sisters, but this will not be common. Predominantly, these households will be aged 80 and over, and will approximate the single female in income and equity.

- 3% of all residents will be single males as this population continues to be healthier. They will cluster around 80 to 85 years old and be financially stable.

(Based on conversations with Sandra Howell,
MIT, 1987)

These characteristics will have serious implications for developers of tomorrow's CCRCs, but they are just as important for today's facilities which expect to still be marketable in the future. In terms of square footages, residents will demand a minimum one-bedroom of 800-950 SF and 1100-1500 SF for 2 bedrooms. Studios will no longer be as marketable and are likely to be replaced by 700 SF one-bedroom units, if built at all. Some 20% of couples living together will have one person with only fair health, and thus will expect some in-apartment assistance or personal care. If the risk of increasing long term health

care costs can be diversified away through third party long term care insurance policies, then income related health characteristics may be a moot issue for developers or operators of CCRCs.

It is also interesting to note that residents of CCRCs tend to be healthier and live longer than their non-CCRC counterparts (Winklevoss and Powell, 1984) so profiles of existing CCRC residents may not be drastically altered over time.

2.2.3. Resident Affordability Concerns

The majority of the age eligible elderly population cannot afford CCRCs. This factor further constrains the programmer's assumptions about a population segment which is already impacted by age, sex, marital and health status, and perceptions of CCRCs being a discretionary product. But if affordability can be incorporated into the programming process, then it is vital that the income and economic status of current CCRC residents be profiled and overlaid on the preceding assumptions.

Two types of "fees" are paid by residents for the privilege of living in a CCRC: an up-front entry fee and a monthly maintenance fee. Entry fees for the previous wave of non-profit CCRCs have averaged about \$35,000 for one person

and \$39,000 for two persons. Newer facilities on the East and West Coasts have fees that average closer to \$150,000 for a single person, and more than \$200,000 for doubles. In general, entry fees will vary according to location and lavishness of the physical plant. They also vary according to comprehensiveness of the health care guarantees and will increase accordingly (Winklevoss and Powell 1984).

In terms of monthly maintenance fees, one person can expect to pay about \$700-\$1,000 per month, and two persons about \$1,000-\$1400 for a service package that includes one meal per day. Table 2.1, on the following page, details the after tax income requirements for meeting CCRC monthly fees. The table assumes that the elderly individual or couple was able to sell a home, or liquidate assets sufficient to cover the entry fees required up front, and that retired persons can pay no more than 61% of their disposable income on CCRC monthly fees.

Based on expected monthly maintenance fees of about \$900 for a single person, and \$1100 for a couple, Table 2.1 indicates that the single person would need an after-tax annual income of \$17,705; couples would need at least \$26,557.

Table 2.1 -- AFTER-TAX INCOME REQUIREMENTS FOR CCRCs

CCRC Fee * * * * * \$ PER MONTH -----	* * * * *		Qualifying Income * * * * *	
	SINGLE OCCUPANCY -----	DOUBLE OCCUPANCY -----	AFTER TAX INCOME SINGLE -----	COUPLE -----
\$500	\$6,000	\$0	\$9,836	\$0
\$550	\$6,600	\$9,600	\$10,820	\$15,738
\$600	\$7,200	\$10,200	\$11,803	\$16,721
\$650	\$7,800	\$10,800	\$12,787	\$17,705
\$700	\$8,400	\$11,400	\$13,770	\$18,689
\$750	\$9,000	\$12,000	\$14,754	\$19,672
\$800	\$9,600	\$12,600	\$15,738	\$20,656
\$850	\$10,200	\$13,200	\$16,721	\$21,639
\$900	\$10,800	\$13,800	\$17,705	\$22,623
\$1,000	\$12,000	\$15,000	\$19,672	\$24,590
\$1,050	\$12,600	\$15,600	\$20,656	\$25,574
\$1,100	\$13,200	\$16,200	\$21,639	\$26,557
\$1,150	\$13,800	\$16,800	\$22,623	\$27,541
\$1,200	\$14,400	\$17,400	\$23,607	\$28,525
\$1,250	\$15,000	\$18,000	\$24,590	\$29,508
\$1,500	\$18,000	\$21,000	\$29,508	\$34,426
\$1,750	\$21,000	\$24,000	\$34,426	\$39,344
\$2,000	\$24,000	\$27,000	\$39,344	\$44,262

(Based on data presented by Rohrer and Bibb 1986).

Table 2.1 is based on the following assumptions:

1. Double occupancy fees are an additional \$250 per month for each unit.
2. Qualifying income is based on U.S. Bureau of Labor Statistics All-Urban/All-Commodities Family Budget Estimates, "Elderly-Intermediate" level. The assumption is that retired householders can afford to pay no more than 61% of their disposable income on CCRC fees. The 61% rate assumes that the CCRC fee includes entire housing and utilities (less telephone); one third of all food requirements; half of all transportation costs; and 25% of any expected miscellaneous expenses.

Considering that the average annual single elderly person's income is about \$7,500 and for elderly couples it is about \$19,000, it is readily obvious that the possibility of living in a CCRC is beyond the realm of the majority of the elderly. Such a conclusion assumes that the endowment or entry fees required would be covered by the sale of a mortgage-free home.

Home equity is not an unrealistic expectation since 75% of the U.S. elderly own homes which are 80% free and clear of debt. Nationally, their homes were worth an average of \$69,700 in the 65-69 age group, \$57,800 for those 70-74 years old, and \$55,100 for those 75 and older (Real Estate Research Corporation, date unknown). A much studied aspect, home equities nonetheless cannot be taken for granted. Careful examination of local property values,

utilities, real estate tax rates, and physical condition of the elderly's homes is necessary before assumptions can be made about home equity in a particular market area.

In the future, it is expected that real incomes for all those over 65 years old will go up as a result of private pension funds. Although it accounts for only 38% of the elderly's total income, Social Security benefits are tagged to the Consumer Price Index thus providing built-in protection against inflation (U.S. Senate 1987). These two factors should improve the affordability profiles for the elderly consumer of CCRCs; providing of course that the costs of entry do not increase at faster rates than real incomes.

Table 2.2, on the following page, summarizes income distribution for all households age 70 and older in 1985 separated into cash income, and potential home equity if homes were sold and the proceeds invested at 10%. (Cash income includes Social Security, other-than-home-equity investment income, government and private pensions, and earnings from those elderly who continue to work). Work force participation in this age group is relatively smaller compared to those between 65 and 69; (24.6% of males between 65 and 69 compared to 10.4% for those over 70, and for women 14.6% and 4.3% respectively).

INCOME DISTRIBUTION OF 70+ HOUSEHOLDS, 1985

Income	CASH INCOME		WITH POTENTIAL EQUITY*	
	Households	%	Households	%
\$0 - \$9,999	2,337,000	19.0%	1,845,000	15.0%
\$15,000-\$24,999	2,337,000	19.0%	3,198,000	26.0%
\$25,000-\$34,999	984,000	8.0%	1,107,000	9.0%
\$35,000 +	1,107,000	9.0%	1,722,000	14.0%
<i>TOTAL</i>	12,300,000	100.0%	12,300,000	100.0%

*Assuming homes are sold and net proceeds invested at 10%.

Source: Real Estate Research Corporation

Table 2.2 indicates that nearly 50% of the over 70 year old households would have at least \$15,000 per year if they sold their homes. In the context of this thesis however, the financial structure of CCRCs involve an entry fee so it can be realistically expected that the percentage of those with annual incomes capable of carrying maintenance fees, (all those with more than \$15,000 per year), would be only 36%.

In terms of affordability for the single elderly person anywhere below the \$22,000 annual income range, and for couples below \$26,000 annually, it would mean one or more of the following situations must prevail:

1. the resident of a CCRC must be willing and able to commit more than the U.S. Bureau of Labor satatistical average of 61% of their monthly net income towards their monthly maintenance fee. How much more is open to experimentation and debate, though it has been suggested that CCRC residents can pay as much as 74% if they are in a personal or assisted care unit;
2. CCRC developers and operators must be able to lower the monthly maintenance cost of units;
3. annual income levels for the elderly must increase while maintenance fees for CCRCs remain constant; or
4. some new forms of subsidies or investment credits specifically geared to investors and developers of CCRCs must be created at any or all levels of government. Theoretically, these can be tied to more affordable facilities being built.

It is unlikely that the third situation will occur; and the fourth is beyond the realm of the average developer. Hence, the onus resides with the developer to come up with solutions. If indeed solutions are possible, they will be found in the development and operating processes. The following chapter explores the development process with a critical eye toward unearthing just such possibilities.

CHAPTER 3:
SITE SELECTION FOR CONTINUING CARE
RETIREMENT COMMUNITIES

Site selection is the most important decision a developer will make in the process of developing a CCRC. The location of a project will ultimately determine whether the project will be a success or failure in capturing a sufficient market share of age and income eligible elderly persons in the short and long term.

In "hot markets" across the US, developers may want to develop retirement housing of some sort, but cannot find suitable sites. Or when they do identify a particular site, local competition, regulatory restraints, or local market analyses and feasibility studies may make the project impractical or economically infeasible. This is not surprising since developing a CCRC combines the complexities of independent living units with a nursing facility, for a relatively narrow segment of the total population.

The process of site selection begins when the decision is

made to build a CCRC. However, it may be that a site's location and context point the way for development of a CCRC; or, the developer may be persuaded by professional media that a CCRC is a profitable use for land he or she already has. Consider the situation of a 10 acre parcel located in an area with excellent demographics, desirable public transportation and other local commercial amenities, in a largely underserved market, and with potentially favorable regulatory environment. This is an ideal situation, and a developer attuned to the potential of CCRCs as a real estate investment opportunity would have no hesitation in beginning the development process. But in reality, sites rarely combine all these characteristics. The developer is usually faced with the prospect of seeking and optioning more than one site in that local area. The final siting decision is often the result of a series of trade-offs typically founded upon economic feasibility, as well as these can be calculated.

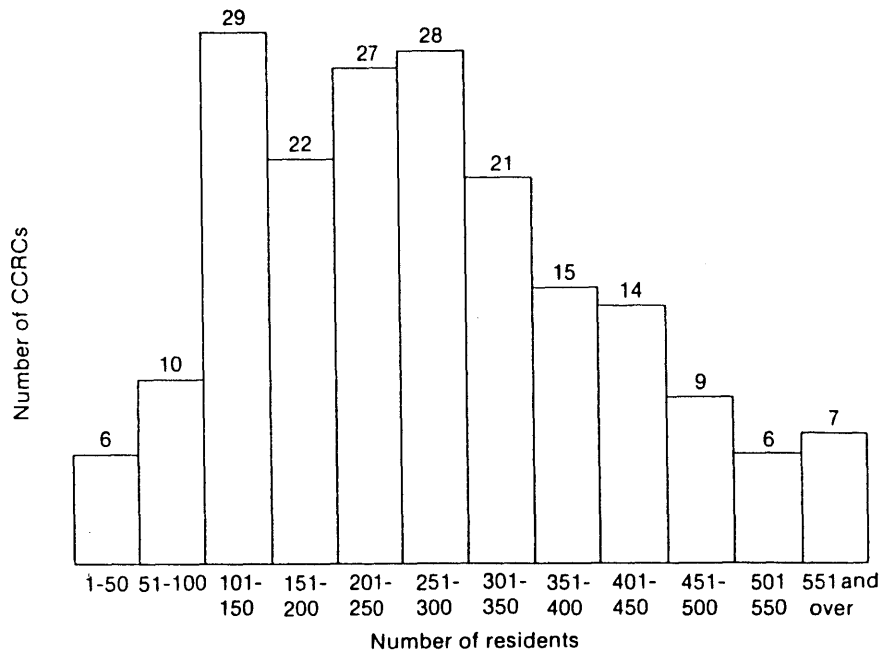
Affordability concerns in site selection must focus on issues which affect the initial acquisition and project development costs of that parcel. That is, once it has been determined that a particular local area has the demographic characteristics necessary to support a CCRC, the developer must focus his or her attention in a systematic manner on issues of affordability which will directly and indirectly affect the profitability of development and operating pro-formas.

3.1. PROJECT SIZE

One of the first questions a programmer needs to consider is how big the project should be. This is often a function of how much land is available, especially in "hot markets." But there is no hard and fast rule regarding the optimum size of a facility. Table 3.1, below, illustrates that the distribution of CCRCs by resident population is relatively uniform, with the median project having between 200 and 250 residents.

Figure 3-1 -- MEDIAN CCRC PROJECT SIZE

Distribution by Total Number of Residents



(Source : pg. 47, Winklevoss and Powell, 1984).

For the purpose of this thesis, the development and operating set-ups in the Retirement Housing Consultant System assume project sizes to be around 300 units, which translates to about 390 residents if a 30% double occupancy rate is used.

Over time, the trend in CCRC size has been toward more residents and bigger facilities (Winklevoss and Powell, 1984). There is no one clearly acceptable rationale for this evolution, but it seems to parallel the increasing sophistication of CCRC developers and operators. As well, the CCRC industry is becoming more consolidated as the number of multi-facility owners grows larger, and facility designs have improved from the user's perspective so big projects no longer need to be seen as "institutions." As a consequence, this issue must be considered as dependent on a number of key elements which must be viewed individually and collectively in a more systematic manner. These are:

- a. SITE ACREAGE;
- b. REGULATION (D.O.N. & ZONING);
- c. TOPOGRAPHY;
- d. NEIGHBORHOOD CONTEXT;
- e. LAND TENURE & Potential room for expansion.

The above imply that when examining a particular site, there are five key inputs which will determine how big the project

will be. This is of course based on the assumption that the preliminary market analyses allow the programmer to contemplate as large a project as the parcel can accommodate in order to maximize economic returns.

3.2. *SITE ACREAGE*

Not surprisingly, the acreage of a Continuing Care Retirement Community depends on the proximity to a metropolitan area. In 1984, the typical acreage of a project in a metropolitan area was 6 acres, while projects outside a metropolitan area averaged 29 acres (Laventhol & Horwath, 1984).

Finding available land for the development of a CCRC is a function of the real estate marketplace. In "hot" real estate markets, land can be assumed to be difficult to find and expensive, making large acreages prohibitive. (The contribution of local, state or federally owned land can therefore become one of the incentives for the developer). Conversely, in a market which is not as competitive, land values tend to be lower and larger assemblies more likely. In this same context, urban versus suburban versus rural locations will determine how much land is assembled and at what cost.

3.3. REGULATION

CCRCs typically receive a significant amount of attention from regulatory bodies because of the newness of their concept and the often limited amount of governing legislation. Also, because of their increasing popularity and the flood of inexperienced for-profit organizations wishing to develop them, CCRCs are under more scrutiny than when they were individual, local non-profit efforts. There is much potential for mismanagement and fraud since a CCRC typically receives millions of dollars up-front in entry fees. These funds are earmarked to pay all or most of a project's development costs, with the balance sitting in a reserve account to cover inevitable operating deficits when health care expenses mount up in the future (Williams, 1985). Some observers have noticed the increasing market presence of for-profit developers and are demanding stricter consumer protection, especially given the history of fraud involving some supposed non-profits and church organizations. Critics claim that without adequate nation-wide consumer protection, it could result in more defrauding of the old. They frequently cite the 1981 fraud cases involving the United Methodist Church and Pacific Homes, and the Christian Fellowship Foundation's Alabama Meadows (Topolnicki, 1985). Other well publicized bankruptcies in the Sun Belt provide additional evidence in support of their paranoia.

Thus far, the Federal government has limited its involvement in CCRCs to Medicare review of the on-site nursing facility. This "laissez faire" policy has essentially left the states to independently govern, (or in most cases, ignore), the marketing, operation and development of CCRCs. Massachusetts, for instance, is a state which is relatively new to CCRC development and is experiencing the growing pains of a regulatory system racing to keep up with a flood of interest from increasingly sophisticated development interests. While there are only four facilities currently in operation, a current count of Massachusetts projects which have filed for a Determination of Need, (DON), applied for zoning, or otherwise made large financial commitments, equals thirty-six.

In response to this level of activity, the Commonwealth of Massachusetts is considering a special piece of CCRC legislation called Proposal 108 or H 108. Titled "An Act Regulating the Sale of Leases in Long Term Care Communities or Continuing Care Retirement Communities," it is principally intended to protect consumers from organizations unable to fulfill contractual obligations. As a consequence of this goal, the State will review actuarial and operating budget assumptions made by the developer. Massachusetts encourages "Lifecare" versions of CCRCs by allowing the developer to ignore "bed need" requirements like a Certificate of Need,

(CON). Unlike many other States, Massachusetts will grant DON approval for a ratio of one bed for every five independent living units, if the developer guarantees that no resident of the CCRC will ever apply for Medicaid subsidy, provided that a 50% pre-sale and other requirements are met. This is indicative of the complexities and inconsistencies within the national regulatory system.

Regulations are often the default setting mechanism in programming. That is, local zoning restrictions may prohibit development of more than a certain number of units on a particular site because of density requirements. Similarly, the form of the CCRC project itself may be dictated by specific height and massing guidelines which affect the floor area ratio and mix of independent living units. In both of these instances, it may be possible to seek zoning variances to resolve specific design and unit mix issues.

For the SNF, Levels I and II ICF, Level III or Level IV Rest Home or personal/assisted care facilities, if licensed, the developer will need to initiate a Determination of Need, (DON), procedure. Sometimes referred to as the Certificate of Need, this procedure is administered by State agencies overseeing the development and planning of long-term care facilities. The intent of such permits is to ensure that the new facility is indeed meeting a demand and not duplicating

similar readily available facilities, and secondly to examine the economic soundness of current and future operations so that consumers will be protected from poorly planned facilities. D.O.N. procedures are lengthy, often taking two to five years for approval. This time lag is a crucial concern for the developer who may be forced to carry costs on an idle piece of property while awaiting approvals.

Integrally tied to the DON process is the notion of project development staging and physical plant transformability. In other words, adaptability of units must be able to satiate the higher care needs of the residents in the future.

In general, one might say that developers view regulatory processes as inconveniences. If at all possible, they would avoid regulations altogether, or supplant them with processes of negotiated settlement where tradeoffs can be made in a more bilateral manner. Hence, one obvious opportunity to achieve some measure of cost effectiveness in the overall project development cycle is embodied in the regulatory process. Consider that some measure of cooperation between local, state, and other regulatory commissions in addressing the unique nature of CCRCs, and thus developers and consumers can gain from shorter time lags in D.O.N. approval, or from density bonuses.

3.4. TOPOGRAPHY

Like acreage, topographical factors on the particular site can be major constraints in determining how big a project will be. The elderly are particularly sensitive to physical features which can affect their ambulatory capabilities. As a result, sites with sharp changes in grade, wet spots which can freeze and become slippery, or unprotected spaces which are susceptible to gusty winds need to be designed so that these features are mitigated. This does not mean that the ideal site should be completely flat, dry and sheltered. It may be desirable to have a site that has some potentially interesting natural features which can be site planned in a sensitive manner to enhance the visual and aesthetic qualities from inside a facility looking out, and from outside sheltering spaces close to a building, or obscuring buildings altogether.

In "hot markets" finding a topographically ideal site which is also large enough for a CCRC, can be nearly impossible. As a result, developers and site planners will likely find themselves grappling with particularly difficult parcels that will invariably be expensive to grade, drain and landscape, adding to project development costs and ultimately increasing the entry fees for the consumer. In one situation, a developer wanted badly to be in a particular town near Boston

but the only available site was steep and rocky. Site improvement costs were consequently exorbitant and necessitated an extensive network of ramps and stairs. This site plan proved to be a drawback in marketing and additional dollars had to be expended on site grading. Fortunately the market segment had the financial capability to absorb all increases in project development costs that were passed through in the initial entry fees. It is a safe assumption that the thin margin of affordability characteristic of the middle income market segment would not be able to absorb fee increases of this nature.

The site improvement aspect of affordability cannot be dispensed with unless another site is assembled, likely requiring the cooperation of local government. There is no substitute for a site expressly designed and prepared for elderly residents, and if the cost of extraordinary site preparation cannot be avoided through innovative site planning, then it must be absorbed by the project.

Topography is also an issue in determining the physical configuration of the facility, be it low-rise campus style or high-rise apartments. Sub-soil conditions will often dictate where bearing pressures are sufficient to support certain loads, and thus it may require a tradeoff between building location and open spaces. For example, it may make more sense in terms of overall project affordability to use a

particular structural system that is cheaper because of sub-soil bearing capacity, and trade the resultant savings against any increment needed to create a physically desirable recreational element or open space environment in another location on the site.

Consideration must also be given to the shape of the site. Angular or complex shapes with narrow strips or dog-legs may not allow high densities, nor will they be as flexible in configuring the physical plant as a square plot. As a rule of thumb, any dimension less than 150 feet is going to be excessively limiting for site planning (Good and Farrell, 1987).

3.5. NEIGHBORHOOD CONTEXT

Often, in attempting to determine a meaningful market area, a developer will draw a series of arbitrary circles with radii at five mile intervals around a particular site. Though apparently comprehensive and certainly convenient, this practice tends to reinforce the common misconception that the physical environment is homogenous enough to be divisible as such. If such rings are drawn, then certainly the first and most carefully considered one should have a radius of only one-quarter mile, simply because it is the neighborhood context of the facility.

Neighborhood context should be the most important zone of analysis because what is happening in areas adjacent to a facility affects the residents on a day to day basis. Though CCRCs tend to be relatively isolated from the surroundings because of their campus setting and inward-focused design, it can be assumed that the elderly will have some interaction with the local neighborhood.

To this extent, a neighborhood context which is service-rich with recreational and other community amenities, (like restaurants, bars, libraries, shops, beauty salons and grocery stores), will mean that residents can have more options and hence feel richer and stronger connections to the mainstream of their community. In contrast to this example, a CCRC which is sited in a rural location will need to build-in those elements which contribute to a sense of community.

The physical, social and psychological context of a particular neighborhood can also set the tone for the development of a CCRC. Consider that a mostly natural setting can instill and reinforce the pastoral element of a CCRC; a mature, well treed, stable suburban residential area can be capitalized on for its image and safety; a natural feature like a lake or golf course can allow an "amenities" orientation; and of course, an unsafe urban setting without

parks, public transportation or good shopping facilities can exasperate much of the concern the elderly have about living in cities.

A common concern of the elderly is physical safety. Neighborhood context is the key element affecting the sense of safety a resident will experience, so it makes sense that developers first examine the nature of the immediate neighborhood and establish where potential benefits and liabilities lie before drawing the circles around the site for more market analysis. A site may have some unique cultural element which would make a CCRC oriented to capitalize on that feature potentially attractive to elderly from outside the normal 15 mile radius. For example, several school-related CCRCs in Massachusetts are trying to capitalize on this element for development and marketing purposes.

A carefully planned and designed CCRC can ignore its neighborhood context altogether and focus itself inwards as a self-contained entity. Many of them are, but the residents pay for the conveniences through increased project development and operating costs, and are socially and psychologically deprived of relationships with wider world experiences. In consequence, it can be assumed that a CCRC which is more symbiotic with its immediate surroundings can achieve some level of cost saving from the developer not

having to build-in certain amenities easily accessible in the locality. The Michigan State Housing and Development Authority criteria for site proximity to neighborhood facilities, (Table 3.1 below), outlines the typical range of service needs and recommended distance from an elderly individual's unit. This data should be thought of primarily as fostering a sense of "integration" rather than "segregation."

Table 3.1 -- PROXIMITIES FOR A SERVICE-RICH NEIGHBORHOOD

Facilities *****	Distance From Unit *****
1. supermarket or grocery store	1,500 feet or 2 blocks
2. drugstore	1,500 feet or 2 blocks
3. transit stop	1,500 feet or 2 blocks
4. department or clothing store	2,000 feet or 2 1/2 blocks
5. bank	2,000 feet or 2 1/2 blocks
6. beauty/barber shop	2,500 feet or 3 blocks
7. restaurant	3,000 feet or 3 1/2 blocks
8. post office	3,000 feet or 3 1/2 blocks

(Source: ULI, 1986)

In a CCRC, one meal per day, (most often dinner), is typically pre-paid and provided for the resident. Other

meals are largely the responsibility of the residents while they are living in the independent apartment units, so some amount of grocery shopping is still a requirement. A small grocery store stocking essential or frequently used stock in limited quantities can be provided on-site, and is a recommended amenity. However, other desirable services may not all be providable in the same manner, like a clothing store or a bank, and so transportation must be provided. This recommendation does consider the fact that residents will not always want to shop in their neighborhood, desiring visits to specialty locations, but the lesson in programming is that a supportive neighborhood can be of some benefit in planning services.

3.6. LAND TENURE AND ROOM FOR EXPANSION

Expansion should be thought of in terms of phasing and the attendant options for structuring land tenure. In the creation of large projects, phasing of the development process is recommended, especially in consideration of market conditions and absorption rates for the independent living units. The major problem with this strategy is that the over-building of amenities in Phase 1 that is required for initial marketing, may become a burden if the later phases of apartments are not built-out.

While a developer may not wish to purchase outright a large parcel of land and phase development of a CCRC on it, a recommended approach is to purchase only the portion of the land needed to build out the first phase of apartments and SNF, and only optioning that portion of the property needed for future build-out. Optioning effectively allows a smaller initial land cost for the key site and a comparatively low carrying cost for the optioned property.

Ground leasing is another option for land tenure that can be effective. Developers may be able to reduce front-end costs by avoiding the cumbersome land acquisition process and its crippling expense by negotiating long term land leases. As well, the developer may be able to gain an influential ally if the lessor or land owner is well known in the local community. For example, a major university in Massachusetts gave a renewable 49 year ground lease of prime school property for the development of a 350 bed CCRC. Another local university is currently in the Request for Proposals stage for a similar land lease arrangement. This particular joint venture would give the designated developer a significant amount of credibility with the local community, financiers and regulatory agencies. Though fully unexplored at this time, land leasing may also have preferential tax treatment for an operator of a CCRC which would be a further benefit.

A similar situation may occur when a developer is unsure

about a region's or market's long term ability to support CCRCs. While it may be sensible initially to build, say, 150 units, the potential for expansion may arise at some point in the future. To absorb an additional 150 units, it would be ideal to be able to acquire adjacent property for development. This is the kind of anticipation of long term options a developer must engage in at the programming stage when examining site context.

CHAPTER 4:
DEVELOPMENT ISSUES IN
CONTINUING CARE RETIREMENT COMMUNITIES

From the developer's perspective, risk boils down to the possibility of not realizing an expected outcome. Risk aversion is therefore a full-time preoccupation of all those involved in the programming and development of real estate projects. The interpretation of any definition of risk in developing shelter and care facilities for the elderly should be expanded to include the high risk of not coming to terms with the unique nuances of the elderly as user.

Developing a Continuing Care Retirement Community requires very specialized knowledge not readily transferrable from traditional commercial or residential development experiences. It is often mentioned that developing and operating a CCRC is really an amalgam of four businesses in one (Taplin, 1986; Schneider, 1987):

1. Housing that is really akin to a hotel which offers maid, flat laundry and food services.
2. A health care facility that residents have ready access to.
3. A social club that provides activity settings for a variety of functions that are frequently under partial or total management supervision.
4. An insurance underwriter that pools risk and is thereby able to offer its residents a lifetime of services.

The complexities of developing a CCRC primarily revolve around a meticulous site selection process; a protracted start-up period involving compliance with unique regulatory requirements; unconventional financing options; specialized physical plant construction; and a particularly complicated and lengthy marketing process, (also involving a pre-sale period of one year or more).

The first step after site selection is deciding what kind of CCRC should be built. Once a basic model or CCRC type is selected, the facility programming process can continue to determine how big the CCRC should be, what kind of unit mix, the types and square footage allocation of common spaces, and eventually how this physical plant is to be financed, priced and marketed. Throughout all of these steps, evolving financial projections help the developer or programmer to be cognizant of those elements which can contribute to affordability.

4.1. TYPE OF CCRC

As previously mentioned, the decision concerning what type of CCRC should be built will fall out of very detailed and comprehensive local market analyses based on information from both primary and secondary data sources. It may be influenced by the goal of the developer/sponsor in getting into this business in the first place.

The formation of surveys and data collection plans should ideally be generated from specific data collection and market research, including focus group exercises which help to fine tune a program. As it is important to know the survey target area, a key factor in the conduct of market analyses is the identification of a Primary Market Area, (PMA), and a Competitive Market Area, (CMA). The PMA is the area from which the majority of the demand for the particular product will be generated. The CMA, alternatively, is the region in which competition from existing and planned facilities can be expected. Though not always different, it is important to consider absorption, pricing and programming in these two contexts.

Thorough surveys of PMA and CMA conditions should provide the developer or programmer with the following information to

help that him or her make an educated decision (Parr 1987):

1. the number of age and financially eligible households who are interested in moving to specialized retirement housing;
2. the personal health characteristics and current living arrangements of potential retirement center residents;
3. the services and financial plans of interest;
4. the likes and dislikes of current living arrangements, including building design, apartment size and amenity preferences;
5. the specific fears and concerns which respondents have about moving to a retirement community; and
6. the respondents' readiness to move.

Much of the failure of CCRC projects can be attributed to poor targeting resulting from ineffective market segmentation, and overly optimistic absorption assumptions. Developers often incorrectly assume that they are pursuing the same populations as the residents of highly successful and well known developments like Sun City and Westbrook Village in Arizona, Carolina Lakes and Carolina Trace in North Carolina, and similar communities in California, Texas, and so on (Rohrer and Bibb, 1986). However, these facilities are leisure or resort communities providing lifestyle and service packages catering to a younger and more active market segment, (those in their 60's), which is clearly differentiated from the CCRC market segment, (those 70 and 80 year olds).

Essentially, there are five major CCRC models: (i) the leisure model; (ii) the quasi-leisure model; (iii) the services model; (iv) the medical model; and (v) the personal care model (Roher and Bibb, 1986). Table 4.1 below summarizes the key differences.

Table 4.1 - SELECTED CCRC MODELS

MODEL	TYPICAL AGE RANGE	TYPICAL RANGE OF SERVICES
-----	-----	-----
LEISURE	64-74	Recreation, social interaction, environmental stimulation. Typically fee simple zero lot line homeownership.
QUASI - LEISURE	70-74	Combination of health care and leisure services, e.g. golf courses and skilled nursing beds, full kitchens in apartments, and congregate dining rooms.
SERVICE	75-79	Serves 1-3 meals per day, provides housekeeping, laundry, transportation, social activities, e.g. a fairly traditional adult congregate living facility with kitchenettes.
PERSONAL CARE	80 +	Serves 3 meals, provides housekeeping, laundry, transportation, social activities and assistance in dressing, grooming, and ambulation. Need driven. May not have on-site nursing care.
MEDICAL CARE	80 +	Complete range of health care and shelter services, e.g. traditional Lifecare and CCRCs. A high percentage of nursing beds compared to apartments.

(Source : Roher and Bibb, 1986 adapted by S.W. Meister, in Retirement Housing Report, Jan. 1987).

Although there may be facilities which do not strictly fall within any of these parameters, each model is intended to conceptually distinguish a particular product form and its corresponding market segment.

For the purposes of this thesis, the Medical Care model dominates the choice for analysis of the project development process. The Medical Care model is selected because it best exemplifies the "continuum of care" aspect of CCRCs. These facilities provide prepared meals and licenced dieticians, emergency call systems, chauffeured transportation, and nursing beds. They also provide an intermediate level of care between independent living and skilled nursing care which is known as "assisted living" or "personal care." Assisted living or personal care may be administered in the resident's units if the units are designed to allow this. More typically, the CCRC designates certain personal care units which the residents move into for that level of care. Often, the next step for residents who move to a personal care unit is to the SNF, however moving back to their own unit is not unusual.

Medical Care model CCRCs can be separated into two distinctly different pricing systems: the traditional up-front endowment and monthly maintenance fee model, and the more recent rental and fee-for-service model. In either model,

ownership is not involved and equity is not accumulated (Rohrer and Bibb, 1986). The prototypical medical model CCRC has its independent living units in a low or mid-rise campus style arrangement, though high-rise facilities are also common. The skilled nursing facility is located on-site but designed and located to be as unobtrusive as possible.

4.2. FACILITY SIZE

One of the many mysteries of this neophyte CCRC industry concerns the issue of optimum project size. Basically, there is no concensus, but facilities have been tending toward larger numbers of units over time (Winklevoss and Powell, 1984).

Part of the rationale for trending to more residents may be that spiraling maintenance and operating costs can be partially alleviated by the economies of scale that larger projects offer. Another factor may be that a larger resident population in CCRCs allows better risk pooling of expenses, especially in Lifecare or Medical Care models where prediction of health care utilization is actuarially based. Developers will go through the same steps in costing, staffing and planning a CCRC for 100 units as for 300 units, but the rewards are often much greater if the facility size is larger. From a social management perspective, the

facility administrator of a large urban CCRC noted that a bigger resident population provides an opportunity for greater number and diversity of social and recreational opportunities, since the probability of residents having similar interests increases with their number.

Yet another explanation may be the burgeoning number of for-profit developers entering the industry. For-profit developers are sometimes accused of rationalizing more units as a means of increasing their margin, and for spreading overhead costs among more residents. However, it has not been empirically proven that larger numbers of residents automatically imply better financial status in developing and operating CCRCs.

Project size may be dictated by acreage and/or regulatory constraints, but, notwithstanding this possible default setting, facility size must be soundly grounded in local market conditions. That is, developers should be cautious about projecting more than 1.5 - 2% penetration rates of the age and income qualified market.

4.3. UNIT MIX

As with project location, project type and project size, decisions about project unit mix should be based principally

on local market analyses. It is reasonable to expect that by examining the nature of the age and income eligible elderly population in a particular community, and conducting market surveys, a programmer would be able to determine how many studios, one, two or three bedroom units to build. The underlying assumption being that people will know what they want.

Other key programming decisions such as the respective apartment square footages, unit amenities, and configuration should also result from market research and subsequent analyses. These analyses should be specifically drawn from current area elderly, and focused on users and comparable facilities in the PMA and CMA.

While market analyses are crucial to the decision making process, this does not mean that the programmer and market analyst should necessarily be the same person. Indeed, the process of deciding how many of each unit type should be built must address the unique perspectives and concerns of the three main actors: developer, market analyst, and architect. Any process lacking the participation of even one of these people can be considered deficient. In fact, experts in the field of developing and operating CCRCs caution inexperienced developers to get as many participants as possible into the programming process. This means the financier and any management company if applicable.

The rationale for having input from the developer, market analyst and architect is based on each individual's particular realm of expertise. This aspect can be summarized as follows:

PLAYER *****	REALM OF EXPERTISE *****
Developer	Knows real estate development process. Preoccupied with financial feasibility. Has responsibility for overall project coordination; knows financial budgets and return expectations. May be experienced in developing and operating elderly projects; but not a given.
Market Analyst	Skilled at assembling and interpreting data to profile the local marketplace. Will be able to tell probable absorption rates, and specialized marketing strategies.
Architect	Knows design of housing and health care facilities for the old. Will be able to give input related to how well the unit mix corresponds to optimum physical layout considerations; may have expertise in life cycle cost and construction factors.

Consultants who are expert in the business of developing and operating CCRCs are also important in the initial stages of a project's life. These specialists help to bring the members of the development team up to a competent level of knowledge about CCRCs. In terms of affordability, the participants in the programming process will need to focus their attention on meeting the economic resources of the user with a desirable and environmentally supportive product. This means knowing the range of options and which ones may be appropriate and which ones will mesh best with other choices.

For instance, in conventionally financed projects, decisions about unit mix and respective entry fees are heuristically linked to the size of the construction loan. That is, the programmer backs into the respective unit entry fees by trying to correlate the total entry fees expected with the size of the construction mortgage needed. A better approach would be to: 1. model the ideal package of services and facilities; 2. price that model; and 3. charge fees accordingly. Then it would be possible to conduct "value analyses" to wring out extra cash from all possible elements of the project.

Conversely, from a consumer affordability standpoint it may be better to begin with an expected entry fee and maintenance cost per unit type, and then try to rationalize the other factors by juggling unit square footage and mix.

4.4. AMENITIES

A CCRC project must, at the very least, be perceived as offering a variety of opportunities which appeals to a younger and more active elderly consumer group.

This is not an easy task. Specially designated recreational spaces must be flexible enough to allow a wide variety of

uses and required configurations. For example, an auditorium-sized space should not have fixed seating and a sloping floor because it precludes the space being used for a bridge or bingo tournament, or for wheelchair use at any time. Similarly, the entire physical plant must be designed to be handicapped accessible from initial occupancy, in anticipation of the impending debilitation of its residents. Retrofitting a facility for handicapped accessibility at some point in the future is prohibitively expensive compared to its expense if anticipated and planned for initially.

It should be stressed that it is possible to design a physical plant which does not obviously demonstrate wheelchair supportability, or over-emphasize the fact that it is designed for people whose ambulatory capacities are failing. This is a common oversight or misconception among inexperienced developers of facilities for the elderly. Developers should not ignore the fact that their clients will need these elements in the near future, (even if the users don't like to see ramps and grab bars, or hear about them in marketing). The argument that environmental support adds more expense to a project's development cost is not valid in the context of developing any CCRC. Accessibility elements must be viewed in terms of the building's life-cycle suitability for a user group that is more frail and hence relatively more prone to need support than any other age group.

Social and recreational amenities should not be considered superflous in the context of trying to provide for affordability. That is, just because we are trying to provide for persons with lower economic capacities should not mean that items which contribute to quality of life, but may perceived as non-essential, should be discouraged. Consider instead that not all of the required recreational amenities need be provided on site. As previously mentioned, the neighborhood context of a CCRC can provide some opportunities which should be fully explored. Depending on location, it may be within the realm of possibility to contract with a nearby physical activities complex for those residents of a CCRC who wish to use a swimming pool or spa, exercise bicycles or a walking track. In this situation, regularly scheduled transportation to and from a nearby health club can allow more contact with the community, and be nearly as convenient as an on-site facility but without the infrastructure cost. Transportation and membership fees are likely to be negligible if considered in terms of group use.

4.5. DESIGN ISSUES

It should be assumed that the primary objective of all CCRC environmental design is to assist the individual to maximize

independence as long as possible. Further, it is the basic intent of a continuing care environment to assist residents in adapting to physical and psychological changes which occur in their later years (Obenland, 1976). Inherent in the concept of a continuum of care is the ability of the facility to alleviate the problems associated with relocation as the residents' housing and health care needs change (Marans, Hunt and Valko, 1984). It should be noted however, that the process of the user seeking his or her own level of environmental and service suitability is not necessarily one way. That is, elderly persons may, over time, regain skills and abilities which were lost or impaired for a period of time (Obenland, 1976).

Design programming for Continuing Care Retirement Communities provides an important opportunity for the integration of issues relating to affordability, most notably, those which promote flexibility and options for use.

Architectural flexibility is difficult to achieve, mostly because architectural design specifications for elderly housing and health care are defined by codes and statutes. The opportunities that exist focus on the ability of the independent living units to be supportive and functional as the resident ages. Consider the initial "wants" of the population in terms of amenities and design of their units, and recognize that those elements may well contribute to the

sale of the unit, but remember that over time its true utility is how well it meets the residents' "needs."

In essence, the unit's functional flexibility must parallel the evolution of the current owner, but must also be able to revert back to satisfying the "wants" of a new and more independent owner upon turnover. For example, during the marketing phase a prospective resident will not likely be sold on the prosthetic elements of a unit, (like grab bars, wheelchair accessibility, or lever controls). Instead it can be expected that a de-institutionalized ambience emphasizing design elements like full kitchens and walk-in closets will be most desired. Common spaces initially provided for social or recreational activities should also be inherently flexible to allow adaptation as demands evolve over time. For example, today's exercise room should be readily convertible to tomorrow's personal care unit (Jaffe, 1986).

These factors once again demonstrate the fundamental inconsistencies of providing for "needs" and "wants" that underpin so many facets of programming a CCRC.

Retrofitting units or common spaces in a CCRC because of functional failure is expensive and inconvenient for both user and facility manager. The solution to this problem lies in having an architect and contractor recognize the physical elements that typically need retrofitting, and provide for

them in advance. For example, bathrooms must be large enough to allow for a wheelchair turning radius, or for a resident to receive assistance from one or more aides; hardware should be lever-type, not knob; all doorwidths should be wide enough for a wheelchair, or for two people to pass through side-by-side; no thresholds or floor textures which would make it difficult to move about if using a walker; shelves in closets and in the kitchen need to be lower and more accessible; electrical wall outlets raised at least another foot; and windows low enough to allow someone sitting in a chair to easily see outside. Note that none of these elements are significantly more expensive to provide than the convention, if at all.

In a true continuum of care environment residents are more able to age-in-place than any other setting currently available. This concept is illustrated by the chart on the following page. The architectural design of each CCRC setting must be able to satisfy its required service and care needs. It is obvious then that the majority of the flexibility that must preoccupy the designer and builder be focused on the Independent Living Units.

CCRC SETTING

Independent
Living
Unit

- SERVICE/CARE NEEDS CONTINUUM

1. flat laundry, housekeeping, one meal per day, active and passive social activities, periodic medical attention.
 2. all laundry, housekeeping, all meals with some assistance eating dressing and bathing. Passive social activities and more regular medical attention.
 3. all laundry, all meals, regular assistance for all daily functions. Social activities reduced but still desired. Regular medical care.
 4. all meals, skilled nursing care, most activities restricted to SNF, but passage back to main community is encouraged for special occasions.

Personal
Care
Unit

Skilled
Nursing
Facility

4.6. OVERVIEW OF FINANCING OPTIONS

The range of real estate development financing options is in a constant state of flux, especially as a result of the Tax Reform Act of 1986. Financing retirement housing is no exception. The relative newness and popularity of retirement housing developments have resulted in considerably more attention from the financial community in recent months. However, tougher syndication tax rules, longer depreciation schedules, higher minimum tax rates, and limitations on deductions of investment interest have all impacted on the abilities and willingness of entrepreneurs to borrow, build, own and operate retirement housing facilities (Roche, 1987).

It is just these prior incentives and benefits which, if properly monitored, may be provide a major boost for affordability.

Available options broadly fall into two categories: debt and equity programs. While these catgories belie the complexity of possible arrangements, the debt or equity posture is a convenient method of distinguishing between options. It is important to note that these options are not all applicable to developing CCRCs as some restrictions prohibit the entry fee structure or skilled nursing facility components.

The choice of a financing vehicle may not be a choice at all, and the developer must be cognizant of this possibility. Project specific constraints like operating income, cost of debt, and underwriting restrictions relative to the developer's own equity status may restrict the number of options.

Debt has been the most common financial structure in CCRC development, especially since interest rates have been relatively low in the recent past. This is hardly surprising as debt is perceived as allowing the developer more control over the project than an equity arrangement, and conforms to the traditional notion of real estate debt as a hedge against inflation. Typical debt financing are mortgage-oriented options obtainable from three main sources: commercial banks,

governments, and pension funds. Insurance companies are also becoming more interested in CCRCs.

Equity options are essentially stock offerings by larger companies which are intent on becoming major players in the retirement housing industry through the simultaneous development and operation of multiple projects. As such, equity offerings are backed by the full faith and credit of the issuing company and traded on a major stock exchange.

4.6.1. Conventional Financing

This the most readily obvious and familiar option for developers seeking to finance a CCRC. Conventional financing arrangements for projects may be a permanent mortgage used to take-out previously arranged construction financing, or just construction financing which is taken-out by the fund of endowment fees collected, (sometimes called resident financing).

There are two main constraints associated with conventional financing: availability of funds and equity requirements (Taplin, 1986). Banks, savings and loans, and other financial institutions will usually lend only about 70%-80% of the total project development cost, with the developer providing the additional equity. "Equity kickers" in the form of participating or convertible mortgages may be

required if the developer is not well capitalized; these are described in more detail later. Frequently also, a "deep-pockets" partner may be required when lenders require recourse from the developing entity on the financing.

Another consideration is that lenders tend to be notoriously conservative and risk-averse, sometimes avoiding retirement housing projects altogether. In such instances it may be that unfamiliarity breeds skepticism owing to the relative newness and uniqueness of CCRCs as an investment. Lenders may not thoroughly understand the continuum of care product and are quick to point out the potential for mismanagement and inexperience leading to project failure more readily than most other types of real estate ventures. Also, whereas normal real estate projects may be seen as adequate collateral, the highly specialized CCRC physical plants essentially make them an illiquid asset if foreclosure is required. Furthermore, no lender wants the unpleasant task of having to foreclose on a CCRC and evict its elderly residents.

In sum, lenders see the viability of CCRCs as heavily dependent on the expertise and track-record of its developer, architect, marketing consultant, and most importantly, its facility management organization. Lenders will scrutinize the project development team and set their origination fees, equity requirement, interest rate, amortization period, and

unit presale expectations accordingly. It can be expected that a project which is able to demonstrate a lowering of development and operating costs, hence more affordable to consumers, will attract lower cost financing (Taplin, 1986). This may be difficult to achieve, but it demonstrates the potential that arises from an affordable CCRC.

The following is an overview of some of the more creative debt instruments currently available in the marketplace (adapted from Roche, 1987 and Hassey, 1987). Their applicability to the development of a medically oriented CCRC with up-front endowment fees is severely limited, due to the myriad of Federal policy restrictions. The primary reason for providing this summary is to demonstrate the potential for financing mechanisms if the overseeing policies adjust as quickly to the rapidly evolving range of CCRC typologies.

4.6.2. Zero-Coupon Mortgages

Sometimes called deferred payment mortgages or Z-notes, they combine all of the features of conventional mortgages, with those of an all-cash deal. With a Zero-Coupon Mortgage, the developer essentially pays no debt service during the entire life of the loan, opting instead to pay off an ever increasing principal on the maturity date of the note. By deferring debt service, the developer can better survive the financially draining start-up process. Caution must be taken

to not allow the Zero to account for more than 66% of the total project financing, or the developer will be sacrificing too much of the back end to repay the principal. Zero-coupon mortgages are available from institutional investors like pension funds and insurance companies. This option is more relevant for proprietary all-rental CCRCs and not a real alternative for an endowment model CCRC simply because permanent mortgages can be avoided.

4.6.3. High-Yield Income Bonds

Often referred to as "junk bonds," these are down graded speculative debt, (BB+ or less as rated by S&P), which are privately placed by many smaller, regional brokerage firms, lesser tiered insurance companies, and asset managers. If a tax-exempt bond cannot get an "investment-grade" rating, it falls into the high-yield "junk" category. The advantage of "junk bonds" is that the cost of money will be lower than conventional loans, and the debt service locked into a fixed interest rate which can be an advantage when interest rates are low but trending upwards. As with zero-coupon mortgages, high-yield income bonds are not applicable in a development where the construction loan is taken-out by "resident financing." Junk bonds are typically not used for construction financing because of the short investment period implied.

4.6.4. Participating Mortgages

These have been around for a long time and are better known as the "equity kickers" that lenders exact from developers. Institutional lenders frequently demand participating mortgages when the project is perceived to be relatively risky, and/or the developer is undercapitalized.

Essentially, the developer can secure a mortgage to finance the project but will have to pay about 15-20 points above prime and, more importantly, be required to give up a pre-determined share of increases in net operating income or a percentage of the appreciation of the property over the period of the mortgage. Convertible mortgages work under essentially the same circumstances: a lender will finance a project for the option to convert some of the debt owed by the developer into equity in the project, at some pre-determined time. Though a plausible option for development of a rental or pay-as-you-go CCRC, participating/convertible debt is not viable for an endowment model CCRC.

4.6.5. Tax-Exempt Bonds

Tax-exempt housing bonds are issued under Section 103 (b) (4) (A) of the Internal Revenue Code were a popular vehicle for financing retirement housing until the Tax Reform Act of 1986 decreased the value of tax benefits from 50% to 28%. As

well, these strategies are primarily geared for non-profit sponsors, and proprietary developers will find this alternative somewhat restrictive.

Bonds can function as construction loans or as permanent financing for non-profit sponsors and proprietary developers. Historically, bond financing has been popular with non-profit sponsors of retirement housing because they cover 100% of hard and soft costs, including equipment and underwriting fees. For-profit developers can finance a maximum of 90% of total project cost, but underwriters frequently require significant pre-sales, and federal bond stipulations demand 20% occupancy of the project by residents whose income levels are eighty percent or less of the market area median income level. This may put too much burden on project operations by driving costs too high on the market rate units. Bonds also accumulate up-front issuance expenses totalling about 1% of the bond amount.

Bonds are "rated" by Standard & Poors, or Moody's according to the level of perceived development and operating project risk. Rating is usually bumped up to investment grade by a "credit enhancement" or purchase of credit backing from a credit-worthy institution, (like an insurance company).

Unrated bonds are secured by the project alone and are seen as riskier by the investment community and thus carry higher

discount and interest rates. As mentioned above, less than investment grade bonds can be privately placed by a local financial institution or sold on the "junk" market. For example, the Ziegler Company underwrites and sells unrated bonds through their own chain of Midwestern offices. The Ziegler Company only works with non-profits, sell taxable or tax-exempt bonds, and have a record of no defaults over the past 80 years. These unrated bonds are typically sold promptly to a loyal army of small investors.

There are three types of tax-exempt bonds:

(i) Project specific bonds are typically issued by non-profit agencies like hospitals and are secured only by a priority lien against the particular project. Project specific bonds need credit enhancement or additional backing from a bank or insurance company prior to placement;

(ii) Project specific tax exempt industrial revenue bonds are issued by non-profit agencies like housing authorities on behalf of for-profit developers who have agreed to set aside some fixed percentage of the units for low and moderate income individuals. Credit enhancement may be needed;

(iii) blind pool tax-exempt bond funds are issued by for-profit companies for investment in ventures with non-profit partners. Investors in blind pools do not know the nature of specific projects they have invested in at the time of their buying into the limited partnership venture, nor are the projects invested in strictly retirement housing. In general, blind pools do not need credit enhancement as the pool itself is usually large enough to secure the placement. The common requirement of all bond financed projects is pressure on the operator to produce a significant and consistent cash flow to satisfy bond-holder/limited partnership obligations.

There are significant limitations on the use of multi-family residential property tax-exempt bond financing. Most important in the context of CCRCs is that this funding mechanism is not permitted for the construction of nursing homes as all units must have a private bathroom and kitchen. Other restrictions are as follows:

- Annual volume limitations on issues within each state (maximum of \$250m);

- At least 40% of the rental units must be occupied by tenants having incomes of 60% or less, or at least 20% of units occupied by those with incomes of 50% or less of area median gross income. Annual certification is needed to ensure that such tenants do not individually exceed 140% of their particular unit income requirement; and

- A 15 year moratorium on conversion of any units to condominium or any other non-residential use.

4.6.6. FHA Insured Mortgages

The Federal Housing Authority, (FHA), through the Department of Housing and Urban Development, (HUD), has two programs which are designed to assist in the funding of retirement facilities: programs for retirement centers like congregates which do not require endowment or entry fees (Section 221.d.4); and those for nursing homes (Section 232).

HUD recently instituted a long term funding program of co-insurance on multi-service retirement housing loans whereby the underwriting risk was shifted to the private sector. Once a loan has co-insurance approval, it is eligible for AAA-rated Ginnie Mae securitization via mortgage backed securities. As a result of its credit enhanced AAA rating, the interest costs over the life of a co-insured loan

can be lower than conventional financing.

However, the real benefits of this program are: (i) that loan to value ratios of up to 90% can be insured, compared to 70-75% with conventional financing; (ii) liability is non-recourse, which is very difficult for most developers to secure from a conventional lender; (iii) FHA provides 40-year assumable permanent financing as opposed to 30-year non-assumable from conventional lenders; and (iv) the inclusion of developer profitability as a relevant project cost which conventional lenders would not likely do. Nonetheless, the main benefit of FHA co-insured mortgages may be their relative availability at a time when most conventional lenders are skeptical of financing CCRCs.

Constraints are principally financial and concern financial reserves in the event that the project experiences some difficulty, payment of "prevailing" or union wages for construction labor, and a pre-set regional limit on the amount of mortgage on a per unit basis, (for Boston it is currently \$70,000 for an average unit).

4.7. SUMMARY OF FINANCING OPTIONS

The range of options available for financing the development of a medically oriented CCRC is small, and the effectiveness

of the options limited. One reason is that it employs a pricing method where up-front entry fees are collected and used to pay off a construction loan. This means that the project will not need permanent financing, which is the focus of many of the current debt instruments like participating/convertible mortgages, zero-coupon mortgages, and junk bonds.

Multi-family tax-exempt housing bonds are not allowed for use in the financing of nursing homes, and, as a consequence, the CCRC would need to make a case for separating out the independent living units from the nursing facility. However this would involve double underwriting fees, and other issuing expenses, separate site plans and a number of extra expenses and fees.

FHA insured mortgages under Section 221.d.4 prohibit projects with entry fee pricing mechanisms and are eliminated in this context. Section 232 insurance can be applied to the skilled nursing facility alone, not including the independent living units. If allowed, co-insurance would mean lower interest costs than conventional loans over the life of the mortgage.

In sum, the least cumbersome and best option, especially in a period of relatively low interest rates, is conventional construction financing with a take-out by the accumulated endowment fund. This is open to debate, but it remains

obvious that alternatives must continue to be developed by both government and private sector.

CHAPTER 5:
MARKETING AND PRICING ISSUES IN
CONTINUING CARE RETIREMENT COMMUNITIES

5.1. MARKETING CONCERNS IN DEVELOPING CCRCs

Since the basic planning model for developing retirement communities considers marketing the community and its lifestyle in the fastest most economical way possible, it may be argued that the most expedient focus is to think of CCRCs as "commodities" (Fry, 1977; Streib, LaGreca, and Folts, 1986). However, the extent to which the marketing program for a CCRC can be defaulted in terms of a "commodity" is not clearly demonstrated.

In devising a marketing strategy for a medically oriented CCRC, it is worth reiterating that the age-eligible elderly generally do not think of themselves as requiring such a facility (Rohrer and Bibb, 1987; Schneider 1987). Indeed, if

a resident already needs skilled nursing care, that individual is not an ideal candidate for a medically oriented CCRC as he/she would be an immediate user of the SNF. The National Association of Senior Living Industries notes that to interest the appropriate market segment for a medically oriented CCRC requires a marketing effort "past the point of optimum return" (Rohrer and Bibb, 1986).

Market penetration refers to the percentage of age and income qualified elderly of a Primary Market Area that a project must capture in order to be full. It relates project size to market size. Expected market penetration rates are around 5% in most marketplaces. Rates may be as high as 19% in highly competitive areas like Philadelphia, or as low as 3% in a newer, relatively underserved markets like Boston.

In relatively thin marketplaces penetration rates are greater than 5% and it is incumbent upon the developer to ground the marketing plan for a CCRC in the psycho/social realm of those aged 78 years and older because there is not much room for error. Focus group exercises and surveys can help determine what is built, but when it comes to marketing there can be no substitute for experienced marketing strategists.

The creation of a "Tactical Action Team" for marketing, (Rohrer, 1987), should have at least a \$5,000 per unit pro-forma allocation and be assembled long before project

construction begins. Members of the team charged with the creation of a marketing strategy should not only be sales-oriented, but it is recommended that the project architect, the facility management organization, and an ad-agency be included. This may be an excellent opportunity to bring in the financier as well for input relating absorption expectations with debt service.

Consumer motivation is the key understanding for those salespeople charged with the person-to-person contact. Two schools of thought exist in characterizing the frame of mind of the elderly person when they decide to move to a CCRC. One school notes that more and more independent people are moving to CCRCs, and that if the person is unable to live independently then it may be too late. The other maintains that for an elderly person to move to a CCRC is for him or her to admit, either explicitly or implicitly, that he or she is no longer able to continue living independently (Seiler, 1986). Either way, this is a very difficult realization for elderly persons, and they will defer making a decision as long as they possibly can; (it will often take some sort of health crisis to finally trigger a move). In addition, the elderly are discerning and generally counseled by family members and others. When they do decide to move, it is typically after as many as 7 visits to a CCRC marketing center and months of deliberation.

In general, the elderly will not choose a CCRC to make a lifestyle statement or to move to a more luxurious setting (Seiler, 1986). The reasons for a move are going to be related mainly to location, cost, services, and unit design. Location is important, but unlike traditional real estate marketing, it should not be assumed that it will be the overriding factor for a senior in selecting a facility. The elderly are very service and cost conscious and thus it can be expected that they will be most sensitive to these items. As previously described, the unit design will also be a point of concern for the discriminating consumer. Coincident with the mind-set of other buyers of real property, the elderly will want the most quality for what they can afford. This may imply a comparison of their existing space allocations with what is offered, especially relative to much valued furnishings and household objects.

Much of the success of the marketing program hinges on a well developed sales and advertising campaign, and one of the keys to project affordability. While market analyses are designed to target the development of a facility to the needs of the population, a sales plan is intended to get seniors to want what the developer has provided (Shield, 1986).

The fundamental relationship between marketing and affordability remains the rate at which units are sold, and the amount of the downpayments made. The rate at which units

are pre-sold may result in a lower construction financing interest rate because the developer will have more leverage in dealing with lenders. Financing terms are generally triggered by the rate at which units are pre-sold. As well, a well designed and executed marketing program, combined with high pre-sales and consumer interest, will heighten project desirability and may therefore rationalize larger downpayments, but not higher prices.

Cost effective building can lower entrance fees so getting consumers to commit larger than the usual \$1,000 downpayment or reservation fee when they decide to buy into a CCRC is critical for the developer being able to reduce the amount of construction loan required. Consider that a 300 unit project, with an average entry fee of \$150,000, having 50% presold units at \$1,000 downpayment would only add \$150,000 to the project prior to construction, thus making it nearly impossible for the developer to finance the project. There are a number of options for increasing cash flow during construction. Any or all of the following can be tried:

- an increase in the amount of the downpayment from a straight \$1,000 to a percentage of the entry fee for each unit type. For example, a 10% downpayment requirement would add \$2.25 million to construction cash flow, and so on;

- increased cash flow during construction will occur if there were more than 50% pre-sales. If 70% of the units were pre-sold, \$3.15 million would be available for construction purposes, (assuming a 10% deposit); and
- an additional portion of the remaining entry fee can be collected from each pre-sold consumer as the project reaches 50% or greater stages of completion.

These strategies can add significant dollars for a developer trying to minimize the debilitating construction loan interest charges during the 12 to 18 month project construction period. Providing, of course, that the lender does not require that all pre-sale proceeds be held in escrow as a precaution in the event of project construction failure. If this is the case, then perhaps the developer can leverage off the escrowed presale fund to get a lower interest rate on project financing.

There are serious concerns in assuming that consumers will pay higher downpayments. Often, elderly consumers are undecided about buying into a CCRC and it should be expected that a \$1,000 deposit, with or without a cancellation refund, is a lot easier sell than a deposit of \$10,000 or more. On the other hand, a \$1,000 deposit is less of a guarantee that

a consumer will follow through with the decision to move into a CCRC.

The size of the budget allocation for an advertising and sales plan should be based on the relative awareness of the population with the type of facility being marketed. In more established or "hot markets" consumer awareness and level of sophistication can be assumed to be higher than newer marketplaces simply because of the competition factor.

Relative consumer awareness will no doubt dictate the amount of front-end education of the client that is necessary. This is especially true of the unique and somewhat complex nature of some CCRC issues like entry and maintenance fee structure, refund provisions, and health care coverage. Nevertheless, a rule of thumb is that all ads for a retirement facility should be educational in approach, and focus on quality of life rather than on the bricks and mortar (Shield, 1986).

The media selected for an advertising campaign, and their relative effectiveness, are summarized in the table below:

MEDIA	EFFECTIVENESS
*****	*****
Direct Mail Marketing	Perceived to be the best means to reach seniors. Advantages are: predictability, measurability, personalization and immediacy. Converting responses into sales is key. Usually yields the lowest cost per inquiry.

Newspapers	Most familiar to seniors; have credibility and good readership. Ads should be simple, eye-catching, easily read, and urge action. Economical, flexible and can allow creativity.
Radio and Television	Generally used to supplement other advertising. Can have strong impact as elderly are radio listeners and TV watchers. Fast, economical (radio), and selective (particular stations).
Yellow Pages Silver Pages	An increasingly popular and effective medium for reaching the elderly. Major drawback is that ads cannot change until next year's edition, so be simple: give logo, location, phone number and location of sales office.
Magazines	Depending on type and circulation among the elderly, this medium is recommended e.g. Modern Maturity is exclusively for seniors. Biggest advantage is the opportunity to use color. Again, simplicity, attractiveness and liveliness.
Outdoor Advertising	Recommended as a supplement to other media mainly as a reminder. A sign at the site is a good idea. Other signs should be eye-catching, easily read, and clear project identification.

(Adapted from Samuel C. Shield in Retirement Housing Report, November 1986)

Word-of-mouth is probably the most effective promotion possible. A personal recommendation by one elderly person to a friend or relative is the best sales pitch for a CCRC. This situation is most typical of non-profit sponsors of a CCRC who have constituencies bonded together for some cultural or religious reason. Private developers, without such constituencies, have a much more difficult time trying to generate word-of-mouth promotion.

In terms of affordability, it can be assumed that cost and service package is going to drive the decision making process. As a consequence, all advertising, especially

direct mail marketing, should reflect the affordable nature of the project, and be targeted primarily at those previously identified local age/income eligible elderly. Positioning is an exercise normally crucial to direct mail marketing, but it can also be a valuable mechanism for initiating the marketing program. Matrix Positioning involves the identification of key economics-related aspects of the market segment on one axis, (such as age, income, and health status), and further segmentation according to elements which are perceived to be important motivators for moving to a CCRC, (like desire, need, price, and competition), on the other axis (Shield, 1986). Combining the two allows all media efforts to stay focused. In this sense, it may be worth endorsing a reductionist approach or "commodity" attitude in marketing the CCRC.

Direct mail marketing should be the key element of the marketing program. Next in priority should be an ongoing campaign of simple but easily noticeable ads in local newspapers. It should be noted that the development of a CCRC which is more affordable than others in the local trade area is likely to receive significant press and other attention anyway. (If this is not the case, the developer or marketing coordinator must be tactfully persistent in ensuring that the right individuals are kept apprised of the project's progress). To some extent, radio and TV ads can supplement the direct mail and newspaper marketing campaign.

Purchasing bill-board space and/or multi-color ads in magazines tend to be more expensive and less effective and thus should be lowset on the list of priority, if used at all.

A direct mail campaign should begin as soon as key issues like price, unit mix and service package are known and the project has secured at least a conditional agreement of support from a lender. It should be expected that at least six to ten mailings will be required over the life of the campaign (Shield, 1986). The direct mail package should include a reply card that is easy to fill-out and postage pre-paid for return; an attractively designed, colorful, and straightforward brochure; and, a concise letter of introduction with the project logo, telephone number and name of a direct contact.

5.2. PRICING CONCERNS

Price is the best yardstick in the quest for affordability.

When a CCRC is being planned, the programmer is faced with the dilemma of pricing a product which has an unusually long planning horizon, and where internally contradicting assumptions have to be balanced. Implicitly, a project's pricing and financing structures are closely related and a

particular choice for one will constrain, if not altogether determine the other.

Pricing is not a closed system or a linear process, but an important part of the iterative programming cycle. That is, decisions about CCRC type, project size, unit mix, and service packaging should be firmly grounded in the amount these factors would imply for the entry and monthly fees by unit type. Price is therefore the true determinator of affordability for the consumer, and an important measure of project viability.

The most basic pricing option is whether to go rental and fee-for-service, or the traditional up-front endowment and monthly maintenance fee structure. There are two other pricing options which are emerging: condominium and co-operative ownership. Of the estimated 700-900 existing retirement communities in the United States, some 300 are rentals (Meister, 1987). The majority of existing facilities are the older, more traditional CCRCs which are sponsored by non-profit organizations. In this development model, residents turn over much of their life savings, (generally converting the equity in a mortgage free home), and entrust a CCRC with the responsibility for caring for them for the rest of their lives.

As the for-profit sector expands its presence in the business

of shelter and care facilities for the elderly, more and new variations on the traditional non-profit CCRC development theme are prevalent. This is hardly surprising since non-profit organizations, like churches, are perceived by the elderly as relatively more trustworthy than a for-profit developer when it comes to paying large up-front entry fees. Consequently, the major thrusts of for-profit developers have been of the rental and "unbundled" services variety, where residents pay for services as they need them.

Regardless of pricing mechanism, the basic services and facility characteristics of rentals and endowment CCRCs are very comparable.

There is no real industry consensus on which type of pricing policy is best or which is most desirable from the residents' point of view, although a Laventhol & Horwath survey found that endowment facilities took some 3 months longer than a rental facility to reach 95% occupancy (Meister, 1987). However, that same survey noted that endowment facilities had longer waiting lists and a lower apartment turnover rate. These trends were to be expected given the very nature of the difference in mentality of the seniors choosing either option. That is, rental is seen as a more temporary situation than a Lifecare option and hence will be a less difficult decision to enter or leave a CCRC.

For the purpose of this thesis, the endowment and monthly fee pricing option is assumed. An endowment and monthly fee structure entitles the resident to services and exclusive use of an independent living unit for as long as he/she is physically able to remain there; it is not, however, a fee simple real estate purchase, but rather the purchase of a contract.

Offering a package of independent housing and health care means coming to terms with the concept of insurance to fund its health care liability; (and to a smaller extent, the on-going operation of the CCRC). However, it is difficult for someone whose primary expertise is in real estate, (or in the case of non-profit sponsors, whose primary expertise is in charitable services), to structure a fee schedule which adequately covers the insurance risks of providing long term medical and nursing care (Horn, 1985).

This is how the endowment and monthly fee system works for a new development. When a CCRC is being planned, consumers agree to pay a downpayment at the time they initially make the commitment to enter a CCRC. The size of that downpayment ranges from \$1,000 to 10% of the total entry fee for the unit the consumer wants. Usually, the construction financing source will require at least 50% of the units be pre-sold prior to disbursement of any funds. Upon completion of construction of the project, the resident is expected to pay

the remainder of the entry fee and begin monthly maintenance fee payments when they move into the CCRC.

5.2.1. Endowment Fees

A 300 unit CCRC with an average entry fee of \$50,000 per unit means that the developer will accumulate some \$15 million in a relatively short period of time. This lump-sum represents one of the truly unique features of this form of real estate development. While it gives the developer some flexibility in project financing, it also has some unusual benefits and liabilities if not fully understood in the context of CCRC financing issues.

One option would be to invest the fund and use the interest for debt service on a permanent mortgage. Investing any or all of the entry fee fund has some drawbacks. Most obvious is the problem of negative arbitrage where the invested dollars may have an interest rate lower than the cost of debt. In order to get higher yields, the funds would have to be invested for longer terms which then creates a liquidity problem. Liquidity becomes a concern for CCRC developers and operators should the project experience any unexpected operating deficits, or that a decision was made to use it for funding resident refunds rather than wait until the unit was re-sold. Illiquidity becomes an even bigger issue if the investment revenue stream is expected to cover debt service.

The usual arrangement is for the CCRC to use these funds to finance all or part of the initial project development costs by using the residents' fees to takeout the construction loan. If necessary, the project would need to secure a mortgage or issue a bond for the remaining costs. It may be that the project accumulates a surplus of entry fees above project development costs, in which case the balance would be invested and the interest or dividends used to subsidize on-going operating expenses. An escrow account is another option for any surplus of entry fees. Based on concern about the recent problems affecting the viability of CCRCs, most states and/or lenders are requiring that an escrow account be set aside to cover potential operating deficits in the future.

When a resident dies, decides to move out of the CCRC, or is permanently transferred to the skilled nursing facility, the units are re-sold. Upon turn-over, the previous resident, (or his/her estate), may receive a pre-determined percentage of the initial endowment paid for the use of that unit, based on some vesting policy. Some vesting policies are based on the amortization of 1% per month of the entry fee to the facility, not to exceed the first ten months of residency. Refunding endowment fees does create a problem for the residents as the refunded portion is construed as a loan for IRS purposes, therefore requiring tax on imputed interest.

Under a special 1985 tax law, residents of CCRCs are tax exempt from imputed interest on the first \$90,000 of their refund. This so-called "inheritance" clause is a relatively new development affecting those in CCRC management. While it may be a requirement for some states, given the pace of change and competitiveness in the industry, refunds can be considered a basic requirement for all facilities. A refund policy also benefits the CCRC management since a reserve can be used as a reimbursement to the facility if a resident later becomes indigent and is unable to carry their monthly expenses.

5.2.2. Monthly Maintenance Fees

Monthly fees need to be set at a level which will cover operating expenses, including residents' long term care insurance policies, and can be assumed to increase about 10% per year. The argument that entrance fees hold down the monthly maintenance costs may be a misnomer according to one expert in the financing field (Horn, 1985). He cites the situation of a 78 year old woman with \$50,000 who purchases an annuity that will pay approximately \$750 per month for the rest of her life. In this case, the woman may indeed be better off buying the annuity and controlling the cash flow herself, rather than turn the lump-sum over to a developer. Nevertheless, if compared to a rental arrangement, an endowment model CCRC averages lower monthly maintenance fees

not to mention the health care guarantee.

Entry fees were based on entrant age and/or physical condition in less than 10% of the existing CCRCs. The vast majority of facilities set prices according to a relationship of entry fees with unit size and amenities. This common pricing practice is criticized for ignoring the industry-wide agreement that CCRCs are an intangible product, (insurance-like), and not the real estate or living unit itself (Winklevoss and Powell, 1984). It would seem, however, that the advent of health care insurance policies reduces the need to price according to age and health status.

Entry fees set prior to project development during a period of high inflation, would see an erosion of buying power which will occur during construction, reinforcing the need to keep increasing fees.

Monthly maintenance fees should cover all operating costs and any long term care insurance which is not pre-paid. For simplicity, a single comprehensive bill is rendered every month for each resident. Management must have broad discretion to increase monthly fees as necessary every year. It is particularly dangerous for management to succumb to the temptation to keep the elderly persons' monthly fees fixed while operating costs go up. Unwarranted use of a

contingency budget would spell disaster for the entire project in a financial crisis.

Double occupancy is generally encouraged, but at about \$250 to \$500 per month does not generate much additional cash flow. Double occupancy also slows down unit turnover rates by several years, and unit turnover usually brings additional cash flow after refund of the previous endowment.

From the point of view of operating a nursing facility, possibly 15% - 25% of the residents will need some care for a long term illness. Most admittances will be for a short term illness which can be reduced by providing home care services for residents in their own units. Outside patients must be admitted to fill vacant beds in a skilled nursing facility. In Massachusetts, these patients must be Medicaid or indigent status, which severely limits profitability.

CHAPTER 6:
THE RETIREMENT HOUSING CONSULTANT SYSTEM:
A TOOL FOR PROGRAMMING

The previous chapters outlined the programming process, and proposed a number of options which can be considered at each stage. While this is valuable in comprehending the system, it is not optimally useful as a programming tool.

Hence the creation of a computerized model which can be used by the developer and/or programmer in making decisions about the project. Like a hand-held calculator, the "Retirement Housing Consultant System," (RHCS), can compute arithmetic equations like construction interest which are elements of built-in pro-formas. But unlike a calculator, it is able to prompt the user for inputs which follow a very rigorous and systematic sequence of questions meant to emulate an expert in programming CCRCs. The scope of questions ensures that the developer considers all elements and that key factors are not overlooked.

The combined result is a tool which helps the developer

through the programming phase and allows quick and systematic answers to many of the key questions inherent in this process. The rationale for developing RHCS is primarily to coalesce the entire CCRC programming process and make it more easily understood. Though affordability issues are only addressed as underlying assumptions, RHCS basically encourages a more systematic way of doing sensitivity analyses on those programming elements which may contribute to affordability. Sensitivity analysis is a method of optimization where one element of a system is varied incrementally in either direction, while all other dependent variables are held constant. For example, RHCS can be used to determine the lowest endowment fee per unit, (the independent variable), while all other dependent variables such as development cost, operating expense, unit mix, and so on, are kept constant.

Consider the situation of a developer sitting down to make decisions about developing a particular site as a CCRC. With RHCS, that developer can make several meaningful passes at a facility program, and after a few hours, have a comprehensive understanding of what can be built, for how much, and what it needs to be sold for. Without RHCS, a developer would need to spend weeks creating his/her own development and operating pro-formas, understanding the whole business of CCRCs, and consulting with experts to make sure that his/her assumptions were indeed right and decisions sequenced correctly. In

addition, the system offers the possibility of a print-out of subjective reminders which can be helpful for the developer in addressing the affordability issue. RHCS is also a good vehicle for a novice developer to gain more confidence and inspiration at the start of the project planning process.

Speed, accuracy and a systematic approach are therefore RHCS' strong points.

6.1. RHCS METHODOLOGY

RHCS is essentially a template which is superimposed over a set of development and operationg pro-formas. The tool is written in Lotus 1-2-3 because this software package is the real estate industry standard, and the majority of users will already be familiar with its command strings and formulas.

Inputs into RHCS are via a series sixteen screens with thirty five questions which are designed to capture the essential programming variables. (Appendix 1 outlines the sequence and appearance of the RHCS screens to be used for data input).

In sequence of presentation, the questions are:

1. *site location - (urban, suburban, or rural);*
2. *site size in acres;*
3. *land cost;*

4. market penetration - (low, medium, or high)
5. number of apartment units - (number of nursing beds is defaulted as one for every five apartments);
6. number of studio units;
7. number of one bedroom units;
8. number of two bedroom units;
9. number of other units;
10. square footage of the studios;
11. square footage of the one bedrooms;
12. square footage of the two bedrooms;
13. square footage of the other units;
14. percentage of common space desired;
15. local construction cost/SF for the apartments;
16. local construction cost/SF for common spaces;
17. local construction cost/SF for nursing facility;
18. entry fee assumption for studios;
19. entry fee assumption for studios;
20. entry fee assumption for one bedrooms;
21. entry fee assumption for two bedrooms;
22. entry fee assumption for the other units;
23. monthly rent assumption for studios;
24. monthly rent assumption for studios;
25. monthly rent assumption for one bedrooms;
26. monthly rent assumption for two bedrooms;
27. monthly rent assumption for the other units;
28. financing option - (debt or debt-free)
29. financing vehicle - (defaulted to conventional)

30. *construction loan interest rate;*
31. *construction loan points;*
32. *length of construction period;*
33. *percentage of units to be pre-sold;*
34. *absorption rate of units during construction;*
35. *absorption rate of units after construction.*

Responses to these questions can be conditioned by ranges of comparables presented in each of the sixteen screens.

However, the input for each variable does not necessarily have to be within any of the recommended ranges. This effectively allows a wider variety of options for sensitivity analysis.

Once the data concerning a particular project has been input, these variables are plugged into appropriate equations of development and an operating pro-formas. (Appendix 2 is the project development pro-forma, and Appendix 3 is the set-up for calculating annual facility operations, including 10 year projections). The data presented in the Appendices are not intended to demonstrate an actual situation, but rather are illustrative of the system's capabilities and breath of concern.

There are a number of limitations or defaults in the system as currently presented. The reason is simply that time does not permit the full range of options to be built into RHCS.

The program is now limited to:

1. type of CCRC being built -Medical model;
2. pricing option - Endowment Option; and
3. project financing vehicle - conventional.

It is envisioned that the model will eventually be more comprehensive, and therefore fulfill its true potential as a sophisticated and effective tool for programming CCRCs.

CHAPTER 7:
SUMMARY AND CONCLUSIONS

Continuing Care Retirement facilities are a relatively new business venture for the majority of profit-oriented developers. What is predominantly the realm of non-profit sponsors has, and will continue to, receive a significant amount of attention as the age-eligible population expands. However, as demographics and other factors encourage development of CCRCs, there is serious concern about affordability from the user's, and the developer's perspectives.

6.1. SUMMARY

CCRCs are complex entities to develop and operate. Decisions made during the programming phase are critical to the short and long term success of projects. The foregoing chapters explored the elements of programming a CCRC and identified options which can reflect affordability issues.

Programming a CCRC should begin and end with a correlation of a facility with the "needs" and "wants" of the users. This means understanding the elderly consumer's decision-making process and recognizing that it is hinged on his/her motivations, and perceptions of CCRCs. The majority of the elderly view CCRCs as discretionary purchases. Health status is the main factor that determines their choice to move to a CCRC. Developers need to be concerned about potential residents' health status because financial solvency in operating a CCRC relies on risk-pooling and actuarial assumptions about health facility use. In combination, these two notions are inherently contradictory as consumers will most "need" a CCRC when their health status is doubtful, but developers and operators are wary that this does not make an ideal resident.

The age and income-eligible market segment for a CCRC is narrow. It gets even narrower if that CCRC is of a particular type, such as medically-oriented. Profiling the age, sex and marital status of those who have entered similarly programmed CCRCs, allows a critical analysis of the suitability of a Primary Market Area population for a proposed project. It is also necessary for a programmer to consider the future occupants' profile in order to ensure the marketing viability of the facility in the future.

Project development begins with site selection. Many of the physical attributes and amenities provided by the physical plant and its grounds will have been dictated by location. Programming a CCRC revolves around five key site related determinants: site size or acreage; existing regulation; topography; neighborhood context; and land tenure and potential room for expansion. The most desirable sites are primarily residential, (and thus presumed close to the residents' friends and family), service rich in community activities, and within walking or short driving distance to a shopping mall. Sites which meet this description are most likely to be suburban. Land cost is a major issue and options for land tenure have been limited. However, much potential exists for creative solutions such as leasing arrangements with local universities.

In developing a CCRC, there are major programming issues which need to be resolved. Each of these issues is integrally linked to the short and long term viability of the entire project and need to be recognized as such. Decisions such as what type of CCRC is going to be built, or how big the project should be, or what unit mix and amenities should be provided, must first be grounded in market analyses. These questions also need to be considered relative to the project's physical plant and its suitability for a population which is expected to get more frail over time.

Financing options are limited for those CCRCs which are more health care oriented, and have endowment and monthly fees. The predominant focus of private lending institutions and existing government programs is toward rental projects which are more congregate than continuing care. The lending community is generally unfamiliar with CCRCs and therefore tend to be very careful in their scrutiny of projects and their developers. Significant unit presale, and recourse requirements before issuing construction financing are typically expected.

Marketing is critical for project success and needs have a plan devised by an experienced team of professionals. Budget allocations have to be around \$5,000 per unit. The best advertizing strategy is word-of-mouth, but this is very difficult for developers who do not have constituenties similar to church organizations. Failing this, direct mail is the most cost effective and results-oriented strategy. Other media are to be considered primarily as supplementary strategies.

Pricing brings together the affordability concerns of the consumer with those of the developer. There are positives and negatives from the consumer's perspective depending on whether the CCRC is priced as rental and fee-for-service, or endowment and monthly fee. For example, home equity conversion is a factor which is critical to the consumer's

choice. Developers must be careful not to assume that the elderly will readily sell their homes, however. The pricing option selected has a number of serious impacts on project financing strategy and ongoing operation of the CCRC.

6.2. CONCLUSIONS

If for-profit developers of Continuing Care Retirement Communities are going to expand their market share of the age and income-qualified elderly population, then projects will have to be developed in a manner consistent with affordability concerns.

Solutions to the problem of making CCRCs more affordable need to be considered from within and project development process. Tools such as the Retirement Housing Consultant System are important for developers wishing to make the programming process easier, more systematic and accurate.

Affordability can be addressed through a hybrid of rental and endowment models where varying consumer income and pricing choice can be best accommodated. In these situations, developers need to recognize that the elderly generally have no qualms about living in a mixed income CCRC, especially where the levels of income do not include the lowest income groups. Whatever the income level, the physical environment

of the CCRC needs to vary minimally. Specifically desirable elements such as balconies, views, gourmet menus, maid service, and so on can be made available principally as options for those who are able to pay for them.

Financing options, particularly from the government, need to address the specific nature of CCRCs and be more lenient with tax breaks and other incentives for developers and passive investors. Alternatives need exploration. One source which holds some potential for assisting in project financing are national and local foundations. Charitable trusts and foundations which were established to lend support to elderly-related causes have much potential as financial backers, and as sources of credibility.

The advent of more affordable long term care insurance coverage for the elderly is a major development to be observed. It will reduce the risk of operating a health facility, and encourage other types of retirement housing to offer a continuum of care to a wider income group of the elderly. In the future, more elderly, especially women, will be better financially prepared for retirement. Private pension plans and personal investments for retirement will allow tomorrow's elderly more options for retirement; providing the development sector is able to keep operating expenses under control.

Federal, State, and local governments will need to address issues such as zoning, Certificate of Need approval, and land donations as incentives for developers wishing to develop a project which is more affordable. Joint venturing with non-profits to get potential tax benefits, land, or market accessibility will continue to be a solid option for developers wishing to build CCRCs.

More than any other solution, the issue of affordability in developing CCRCs has to be addressed in the programming process. This is where the decisions about a project are most important.

06-Aug-87

APPENDIX 1
RHCS SCREENS

RETIREMENT HOUSING CONSULTANT SYSTEM

Copyright (c) 1987, Kallenbach/Prashad Associates

06-Aug-87

The Retirement Housing Consultant System provides a framework for guiding the developer through the issues of developing affordable retirement housing.

RHCS covers five areas:

- I. Site selection
 - II. Population and market characteristics
 - III. Project size
 - IV. Project costs
 - V. Pricing policy
 - VI. Project financing
 - VII. Marketing
-

06-Aug-87

1

Name of Project:

Developer:

Hit <ENTER> to continue

06-Aug-87

2

URBAN

Urban sites are typically located in service rich environments that are characterized by higher density and proximity to public transportation, entertainment, and shopping.

SUBURBAN

Suburban sites are not as dense or richly serviced as urban sites, but are predominatly residential. Support facilities are typically clustered in malls.

RURAL

Rural sites are situated outside the boundries of a community. Location characteristics do not comparable with the variety of services and facilities found in a suburban or urban setting.

06-Aug-87

3

I. Site Selection

Size of site: 36.50 Acres
 1,589,940 SF

Total land cost: \$2,340,000

06-Aug-87

4

I. Site Selection -- Issues to be considered

A. REGULATION

- Local zoning considerations; Certificates of Need
- State regulations governing the operation of CCRCs

B. TOPOGRAPHY

- Buildable, few steep gradients, aesthetically pleasant

C. NEIGHBORHOOD CONTEXT

- Service rich; supportive in amenities; safe; accessible

D. LAND ISSUES

- Easements
- Land use history (waste dump liability problems)

E. LAND TENURE AND POTENTIAL FOR EXPANSION

- Options for phasing large projects, e.g. Land Lease
-

06-Aug-87

5

II. Population and Market Characteristics

Model Age Range Range of Services

LEISURE 64-74 Provides recreation, social interaction, and environmental stimulation.

QUASI- 70-74 Provides combination of health care and leisure.

SERVICE 75-79 Serves 1-3 meals, provides housekeeping, transportation, and social activities.

PERSONAL 80 + Serves 3 meals, provides full housekeeping and special assistance in dressing and grooming.
CARE

MEDICAL 80 + Complete range of health care and shelter services

06-Aug-87

6

Depth of market penetration required for a profitable project.

LOW Low penetration requires
less than 2% .
of the eligible population to participate.

MEDIUM Medium penetration requires
2 to 4% .
of the eligible population to participate.

HIGH High penetration requires
greater than 4% .
of the eligible population to participate.

06-Aug-87

7

III. Project Size

Total number of units: 300

Total number of nursing beds: 60

What percentages are planned for the market?

Studios	15%
1 Bedroom	35%
2 Bedroom	45%
Other	5%

100%

06-Aug-87

8

III. Project Size -- Unit Mix Total units: 300

Recommended square foot ranges by unit type.

STUDIOS	1 BEDROOM	2 BEDROOM	OTHER
15%	35%	45%	5%

SMALL	250-300 SF	550-600 SF	875-925 SF	> 1200 SF
-------	------------	------------	------------	-----------

MEDIUM	325-375 SF	600-650 SF	925-975 SF	> 1400 SF
--------	------------	------------	------------	-----------

LARGE	400-500 SF	650-750 SF	1000-1200 SF	> 1600 SF
-------	------------	------------	--------------	-----------

SELECTIONS:	450	750	1100	1500
-------------	-----	-----	------	------

06-Aug-87

9

III. Project Size -- Common Space Total units: 300

Typical common space allocations.

HIGH -- greater than 20% of total living space

MEDIUM -- 15% of total living space

LOW -- 10% of total living space

Common space allocation: 20%

06-Aug-87

10

IV. Project Costs -- Local Construction Costs

Typical construction costs per square foot.

ILU COMMON SNF

LOW \$40-50/SF \$50-60/SF \$60-80/SF

MODERATE \$50-70/SF \$60-80/SF \$80-100/SF

HIGH \$70-120/SF \$80-130/SF \$100-140/SF

SELECTIONS: \$50 \$60 \$70

06-Aug-87

11

V. Pricing Policy

Pricing Options:

ENDOWMENT AND MONTHLY FEES

RENTAL

CONDOMINIUM

COOPERATIVE

06-Aug-87

12

V. Pricing Policy -- ENDOWMENT AND MONTHLY FEES

Typical entry fee structure by unit type.

	STUDIOS	1 BEDROOM	2 BEDROOM
HIGH	\$31,000	\$42,000	\$62,000
MODERATE	\$20,000	\$32,500	\$42,000
LOW	\$12,000	\$21,000	\$32,000
SELECTIONS:	\$40,000	\$50,000	\$70,000

Note: Lifecare contract is a one-time lump sum and monthly fee.

06-Aug-87

13

V. Pricing Policy -- ENDOWMENT AND MONTHLY FEES

Typical monthly fee structure by unit type.

	STUDIOS	1 BEDROOM	2 BEDROOM
HIGH	\$700-\$800	\$950-\$1100	\$1400-\$1600
MODERATE	\$500-\$700	\$750-\$900	\$1200-\$1350
LOW	\$350-\$500	\$550-\$700	\$950-\$1100
SELECTIONS:	\$500	\$600	\$700

Note: Lifecare contract is a one-time lump sum and monthly fee.

06-Aug-87

14

V. Pricing Policy -- Financial Operation

The pricing option selected is ENDOWMENT AND MONTHLY FEES.

Select method of financial operation:

DEBT FREE -- No permanent mortgage
(entry fees take out construction loan)

DEBT -- Invested entry fees and permanent mortgage

06-Aug-87

15

VI. Project Financing

Debt financing vehicles:

CONVENTIONAL FINANCING

ZERO COUPON BONDS

JUNK BONDS

PARTICIPATING / CONVERTIBLE MORTGAGES

TAX EXEMPT BONDS

FHA-INSURED MORTGAGE (coinsurance)

06-Aug-87

16

VI. Project Financing -- Loan Details

Interest rate: 10.00%

Financing charges (points): 2.00%

Estimated length of construction: 18 Months

06-Aug-87

17

VII. Marketing -- Pre-marketing and Construction 300 Units

Market penetration is assumed to be greater than 4% .

25% of project required to be pre-sold.

Estimate sales during construction (absorbtion rate):

HIGH -- 12 units per month

MODERATE -- 8 to 9 units per month

LOW -- 6 to 7 units per month

SELECTION: 5 per month

06-Aug-87

18

VII. Marketing -- Post-completion

Market penetration is assumed to be greater than 4% .

There are 135 units left to be sold.

Estimate post-completion absorption rate:

HIGH -- 7 units per month

MODERATE -- 4 to 5 units per month

LOW -- 2 to 3 units per month

SELECTION: 0 per month

**APPENDIX 2
RHCS SCREENS**

RETIREMENT HOUSING CONSULTANT SYSTEM
PRO-FORMAS

HYPOTHETICAL LIFECARE PROJECT :- DEVELOPMENT PRO-FORMA

PROJECT DEVELOPMENT SUMMARY	Outputs
SITE LOCATION	Urban
ACREAGE	30 Acres
LAND COST (lump sum)	\$2,549,000
LAND COST (\$/unit)	\$7,283 per unit
LAND COST (\$/SF)	\$1.95 /SF
NUMBER OF APARTMENT UNITS	350 units
NUMBER OF NURSING BEDS	70 beds
GROSS SQUARE FOOTAGE OF PROJECT	476,946 SF
APARTMENT CONSTRUCTION COST	\$15,793,750
HEALTH FACILITY CONSTRUCTION COST	\$2,240,000
TOTAL CONSTRUCTION COST	\$27,290,941
CONST COST/APARTMENT UNIT	\$45,125 per SF
TOTAL ARCH. & ENG.	\$1,091,638
DEVELOPER 7.5%of dev. costs	\$0

OUTPUTS IF LAND COST NOT INCLUDED	Total	Difference
TOTAL HARD COSTS (incl. land)	\$34,960,696	
CONSTRUCTION LOAN (incl. land)	\$47,474,002	
INTEREST CHARGES ON CONST. LOAN (incl. land)	\$9,257,430	
POINTS AND FEES (incl. land)	\$949,480	
TOTAL SOFT COSTS	\$22,720,216	
TOTAL PROJECT COST (incl. land)	\$57,680,912	
TOTAL ENTRY FEES	\$53,375,000	
ENTRY FEES minus CONST. LOAN	\$5,900,998	
CONSTRUCTION LOAN (not incl. land)	\$44,925,002	\$2,549,000
INT. CHARGES ON CONST. LOAN (no land)	\$8,760,375	\$497,055
POINTS AND FEES (not incl. land)	\$898,500	\$50,980
TOTAL SOFT COSTS	\$22,172,181	\$548,035
TOTAL PROJECT COST (not incl. land)	\$54,583,877	\$3,097,035
TOTAL ENTRY FEES	\$53,375,000	
ENTRY FEES minus CONST. LOAN (incl. land)	\$8,449,998	(\$2,549,000)

ENTRY FEE CALCULATION

ASSUMPTIONS:

- 1. Double occupancy: 30%
- 2. Double occ. fee/person: \$15,000
(prepaid Lifecare coverage)
- 3. Total num. of residents: 455

Type	%'age	Num. Units	SF	Entry Fee/Unit	Double Occ.	2nd.Occ. Income	Total Entry Fees	Entry Fee/SF	Fee/Unit as % of Tot.Ent.Fees	(not incl.land) Allocat'n of diff. according 'to %'ages	(incl.land) Allocat'n of diff. according 'to %'ages
Studio	20%	70	500	\$80,000	21	\$315,000	\$5,915,000	\$169	11.1%	\$653,947	\$936,426
1 Bedroom	35%	122.5	750	\$120,000	37	\$551,250	\$15,251,250	\$166	28.6%	\$1,686,138	\$2,414,483
2 Bedroom	45%	157.5	1200	\$200,000	47	\$708,750	\$32,208,750	\$170	60.3%	\$3,560,914	\$5,099,089
Other	0%	0	0	\$0	0	\$0	\$0	\$0	0.0%	\$0	\$0
-----		100%	350		105		\$53,375,000			\$5,900,998	\$8,449,998

Increase/Decrease in entry fee per unit type that is required

Type	%'age	Num. Units	(inc.land) fee/unit Diff.	(no land) fee/unit Diff.
Studio	20%	70	\$13,378	\$9,342
1 Bedroom	35%	122.5	\$19,710	\$13,764
2 Bedroom	45%	157.5	\$32,375	\$22,609
Other	0%	0	\$0	\$0
-----		100%	350	

Average Entry Fee: \$152,500
Average Refund @ 90%: \$137,250

Ent.Fees - Const.loan: \$8,449,998 with land cost
Ent.Fees - Const.loan: \$5,900,998 no land cost

150

ENTRY FEE CALCULATION

ASSUMPTIONS:

- 1. Double occupancy: 30%
- 2. Double occ. fee/person: \$15,000
(prepaid Lifecare coverage)
- 3. Total num. of residents: 455

Type	%age	Num. Units	SF	Entry Fee/Unit	Double Occ.	2nd.Occ. Income	Total Entry Fees	Entry Fee/SF	Fee/Unit as % of Tot.Ent.Fees	(not incl.land) Allocat'n of diff. according 'to %'ages	(incl.land) Allocat'n of diff. according 'to %'ages
Studio	20%	70	500	\$80,000	21	\$315,000	\$5,915,000	\$169	11.1%	\$653,947	\$936,426
1 Bedroom	35%	122.5	750	\$120,000	37	\$551,250	\$15,251,250	\$166	28.6%	\$1,686,138	\$2,414,483
2 Bedroom	45%	157.5	1200	\$200,000	47	\$708,750	\$32,208,750	\$170	60.3%	\$3,560,914	\$5,099,089
Other	0%	0	0	\$0	0	\$0	\$0	\$0	0.0%	\$0	\$0
-----		100%	350		105		\$53,375,000			\$5,900,998	\$8,449,998

Increase/Decrease in entry fee per unit type that is required

Type	%age	Num. Units	(inc.land) fee/unit Diff.	(no land) fee/unit Diff.
Studio	20%	70	\$13,378	\$9,342
1 Bedroom	35%	122.5	\$19,710	\$13,764
2 Bedroom	45%	157.5	\$32,375	\$22,609
Other	0%	0	\$0	\$0
-----		100%	350	

Average Entry Fee: \$152,500
 Average Refund @ 90%: \$137,250
 Ent.Fees - Const.loan: \$8,449,998 with land cost
 Ent.Fees - Const.loan: \$5,900,998 no land cost

151

PROJECT DEVELOPMENT COSTS

Facility Construction Costs

Component	SF Area	SF Const.cost	Total cost
Studio	35,000	\$50	\$1,750,000
One bedroom	91,875	\$50	\$4,593,750
Two bedroom	189,000	\$50	\$9,450,000
Other	0	\$50	\$0
Subtotals	315,875		\$15,793,750
Common Areas	56,858	\$60	\$3,411,450
Storage (40SF/unit)	14,000	\$50	\$700,000
SNF (400sf/bed)	28,000	\$80	\$2,240,000
Circulation(85%eff.)	62,210	\$75	\$4,665,741
Elevators (#)	4	\$120,000	\$480,000
subtotals	161,071		\$11,497,191

Total Construction Cost: \$27,290,941
 Total facility area: 476,946 SF
 Average cost/SF: \$57 /SF

152

Site Work and Parking

Item	Total Cost

Sewer, Utilities, etc.:(Site requirements unknown)	\$700,000
Parking: 262 spaces @ \$8,000 per space	\$2,097,600

Facility costs before Contingency or A&E	Sub-total \$2,797,600

A & E	

Conting.&change orders	4% of tot.const.cost \$1,091,638
Arch. and Engineering	5% of conting'cy \$1,231,518

	Sub-Total A & E \$2,323,155

	=====
Total Hard Cost (not including land):	\$32,411,696
	=====
Total Hard Cost (including land):	\$34,960,696

Parking Requirements

	NUMBER	RATIO	SPACE REQ.

Residents	455	0.5	227.5
SNF Users	67	0	0.0
Staff	90	0.33	29.7
Visitors	5	1	5.0

	Total		262

153

PROJECT DEVELOPMENT COSTS (continued)

SOFT COSTS

1. Title			\$10,000
2. Permits & Testing			\$80,000
3. Insurance - Builders Risk			\$100,000
4. Initial Feasibility			\$11,000
5. Market Research			\$25,000
6. Pre-Marketing:	50% requirement		\$875,000
7. Pre-Loan Financial / Actuarial Feasibility			\$30,000
8. Taxes During Construction			\$5,000
9. Clerk of the Works			\$75,000
10. Furniture and Fixtures			\$1,400,000
11. Interior Design			\$90,000
12. Legal Services - zoning			\$25,000
13. Legal Services - Other			\$80,000
14. Accounting			\$15,000
15. Marketing During Construct'n	175 units		\$875,000
16. Marketing After Construction	0 units		\$0
17. Vehicles			\$48,000
18. Contingency Fund			\$274,306
19. Reserve Fund			\$1,250,000
20. Operating losses during occupancy			\$420,000
22. Lifecare Contract Costs (partially prepaid)			
	455 contracts @ \$15,000 each		\$6,825,000
Sub-Total Soft Costs(not incl. financing)			\$12,513,306

154

Marketing Program

Number of units:	350
Construction period:	36
Market Penetration:	300.0%
Pre-sale requirement:	50.0%
units to be presold	175
units left to be sold	175
Marketing cost/unit:	\$5,000

Marketing Pha	Rate units/month	Number to be sold	Months	Cost

Pre-const.	6	175	29.2	\$875,000
During const.	6	175	29.2	\$875,000
Post-const.	3	0	0	\$0

		350	58.3	\$1,750,000

Total Marketing Costs:	\$1,750,000
Total Marketing Period:	58.3 months

PROJECT DEVELOPMENT COSTS (continued)

23. Construction Loan Details:

Interest Rate: 13.00%per annum
Construction Period: 36 months

Loan Amt.(no land): \$44,925,002
Pts.& Fees @ 2.00% \$898,500
Interest Charges: \$8,760,375

Loan Amt(with land) \$47,474,002
Pts.& Fees @ 2.00% \$949,480
Interest Charges: \$9,257,430

24. Total Project Cost (TPC) :

Total Hard Costs(incl.land) \$34,960,696
Total Soft Costs(incl.land) \$22,720,216

TPC \$57,680,912

Total Hard Costs(not incl.land) \$32,411,696
Total Soft Costs(not incl.land) \$22,172,181

TPC \$54,583,877

Independent Living Units

Num.units: 350 Inflation Factor: 5.0%
 Gross SF: 476,946 Start of Const'n: 1987
 Start of Operat'n: 1991
 Const. Period: 36

ADMINISTRATION AND MANAGEMENT

Job Title	# Staff	FTE	9am to 5pm	Eves.	Weekends	1987 Pay level	5% annual		1991 Cost
							Benefits at 22%	Inflation Factor	
Exec. Director	1	1	0.9	0.1	0.1	\$55,000	\$12,100	\$3,355	\$77,165
Asst. Director	1	1	0.8	0.1	0.1	\$35,000	\$7,700	\$2,135	\$49,105
Secretary/B'kpr.	3	3	3	0	0	\$64,000	\$14,080	\$3,904	\$89,792
Controller	1	1	0	0	0	\$36,000	\$7,920	\$2,196	\$50,508
Admissions/PR	2	1.5	1.5	0	0	\$37,500	\$8,250	\$2,288	\$52,613
Receptionist	4	2.99	1	1	1	\$51,392	\$11,306	\$3,135	\$72,103
Resident Svcs.	2	2	1.6	0.2	0.2	\$37,000	\$8,140	\$2,257	\$51,911

TOTALS	14	12.49	8.8	1.4	1.4	\$315,892	\$69,496	\$19,269	\$443,196

Non-Salary Related Expenses

Item	1991	Cost
Activity supplies		\$3,460
In-service education		\$2,400
Marketing - ongoing media		\$24,000
Telephones		\$8,400
Leases: copier, computer, etc.		\$7,200
Supplies - materials		\$3,600
Postage meter		\$2,400
Insurance		\$100,000
Lic., travel, fees, misc.		\$4,800

Sub-Total		\$156,260

156

DIETARY

Job Title	# Staff	FTE	9am to 5pm	Eves.	Weekends	1987 Pay level	Benefits at 22%	Inflation Factor	1991 Cost
Food Manager	1	1	1	0	0	\$30,000	\$6,600	\$1,830	\$42,090
Asst. Managers	2	2	1	1	1	\$42,000	\$9,240	\$2,562	\$58,926
Dietician	1	0.25	0.1	0	0	\$10,000	\$2,200	\$610	\$14,030
Clerk	1	1	1	0	0	\$15,000	\$3,300	\$915	\$21,045
Cooks	4	4	2	1	1	\$78,000	\$17,160	\$4,758	\$109,434
Cooks helpers	6	6	3	3	3	\$96,000	\$21,120	\$5,856	\$134,688
Hostess	2	1	1	1	1	\$25,400	\$5,588	\$1,549	\$35,636
Waitress	13	9.28	3	9	3	\$148,480	\$32,666	\$9,057	\$208,317
Snack Bar & Grill	2	1.44	1	0	0.5	\$23,760	\$5,227	\$1,449	\$33,335
Room Service	1	0.6	0.1	0.1	1	\$10,880	\$2,394	\$664	\$15,265
TOTALS	33	26.57	13.2	15.1	10.5	\$479,520	\$105,494	\$29,251	\$672,767

Non-Salary Related Expenses

Item	1991	Cost
Catering		\$0
Staff meals		\$0
Guest meals		\$0
Residents' extra meals		\$0
Raw food		\$483,566
Food service fee		\$50,000
Operations, Supplies, Admin.		\$35,000
Sub-Total		\$568,566

157

HOUSEKEEPING AND LAUNDRY

Job Title	# Staff	FTE	9am to 5pm	Eves.	Weekends	1987 Pay level	Benefits at 22%	Inflation Factor	1991 Cost
Exec. Housekeeper	1	1	0.8	0.1	0.1	\$23,000	\$5,060	\$1,403	\$32,269
Maids / Porters	17	15.4	12	1	1	\$245,714	\$54,057	\$14,989	\$344,737
Laundress	2	1.6	2	0	0	\$28,350	\$6,237	\$1,729	\$39,775
TOTALS	20	18	14.8	1.1	1.1	\$297,064	\$65,354	\$18,121	\$416,781

Non-Salary Related Expenses

Item	1991	Cost
Laundry supplies		\$30,248
Housekeeping supplies		\$34,147
Sub-Total		\$64,395

MAINTENANCE, JANITORIAL, GROUNDSKEEPING, SECURITY & TRANSPORTATION

Job Title	# Staff	FTE	9am to 5pm	Eves.	Weekends	1987 Pay Level	Benefits at 22%	Inflation Factor	1991 Cost
Dir. of Plant & Prop.	1	1	0.8	0.1	0.1	\$30,000	\$6,600	\$1,830	\$42,090
Mechanic	2	2	1.5	0.5	0.5	\$40,000	\$8,800	\$2,440	\$56,120
Janitorial	2	2	2	0	0	\$26,000	\$5,720	\$1,586	\$36,478
Security/Maint'ce	6	5	1	1	1	\$75,000	\$16,500	\$4,575	\$105,225
Driver/Handyman	2	2	1.1	0.2	0.2	\$24,000	\$5,280	\$1,464	\$33,672
TOTALS	13	12	6.4	1.8	1.8	\$195,000	\$42,900	\$11,895	\$273,585

Non-Salary Related Expenses

Item	1991	Cost
Vehicle expenses		\$5,100
Trash		\$26,400
Repairs & maint. reserves		\$211,500
Maintenance contracts		\$12,000
Maintenance Supplies		\$12,400
Sub-Total		\$267,400

HEALTH PROGRAM

Nursing Unit: 0 SNF Beds (levels I and II)
 0 ICF Beds (level III)
 plus Clinic and Home Care services

 TOTAL Beds 60 Gross Sq. Footage: 24,000

ADMINISTRATION and MANAGEMENT EXPENSES:

Nursing Unit

5.0%

160

Job Title	# Staff	FTE	9am to 5pm	Eves.	Weekends	1987 Pay level	Benefits at 22%	Inflation Factor	1991 Cost
Dir. Nursing & Admin.	1	1	1	0	0	\$40,000	\$8,800	\$2,440	\$56,492
Asst. Dir. Nursing	1	1	1	0	0	\$31,000	\$6,820	\$1,891	\$43,493
Secretary/Ward Clerk	3	3	3	0	0	\$51,000	\$11,220	\$3,111	\$71,553
Medical Records	1	1	1	0	0	\$20,000	\$4,400	\$1,220	\$28,060
R.N.s / L.P.N.s	30	26	9	3	6	\$598,000	\$131,560	\$36,478	\$838,994
Nurses Aides	50	46.6	18	5	7	\$768,900	\$169,158	\$46,903	\$1,078,767
MSW	1.5	1.5	1.5	0	0	\$39,000	\$8,580	\$2,379	\$54,717
Laundress	5	4.4	4	0.2	0.5	\$74,490	\$16,388	\$4,544	\$104,509
Maids/Porters	7	6.2	5	0.2	0.5	\$99,187	\$21,821	\$6,050	\$139,159
TOTALS	99.5	90.7	43.5	8.4	14	\$1,721,577	\$378,747	\$105,016	\$2,415,745

ADMIN. and MGMNT. EXPENSES: Clinic (Lifecare, 24 hr. call, health ed., coord. home care, etc.)

Job Title	# Staff	FTE	9am to 5pm	Eves.	Weekends	1987 Pay level	5% annual		1991 Cost
							Benefits at 22%	Inflation Factor	
Nurse Practitioner	1	1	1	0	0	\$29,000	\$0	\$1,450	\$33,350
M.D.	1	0.3	0.1	0	0	\$28,500	\$0	\$1,425	\$32,775
Home Health Aides	3	2.5	2	0.2	0.3	\$35,000	\$7,700	\$2,135	\$49,105
Health Educator	1	0.05	0.1	0	0	\$1,250	\$0	\$63	\$1,438
Therapeutic Recr.	1.5	1.5	1.5	0	0	\$27,000	\$5,940	\$1,647	\$37,881
Occupatn'l Therapist	1	1	1	0	0	\$24,000	\$5,280	\$1,464	\$33,672
Physical Therapist	1.5	1.5	1.5	0	0	\$37,500	\$8,250	\$2,288	\$52,613

TOTALS	10	7.85	7.2	0.2	0.3	\$182,250	\$27,170	\$10,471	\$240,833

161

Sub-total Health Unit:	\$2,656,578
Admin. & Manag. Clinic	\$240,833
Non-salary related expenses	\$405,288

Total	\$3,302,699

Non-Salary Related Expenses

Item	1991	Cost
Professional Liability Insurance		\$50,000
Supplies		\$115,000
Service Contracts		\$32,000
Conting'cy for health unit		\$204,388
Ambulance Service		\$3,900

Sub-Total		\$405,288

OTHER FACILITY OPERATING EXPENSES

Item	Cost/SF	Multiplier	Annual Cost
Utilities @	\$1.50	476,946 gross SF of	\$715,420
Legal, Accounting			\$18,000
R.E. Taxes	\$2.50	476,946 gross SF of	\$1,192,366
Operating Contingency @ 5% of tot. operating exp.			\$500,000

Total			\$2,425,786

INCOME SOURCES

1. MONTHLY FEES (Rent)

Unit Type	Rent	Rent /SF	Number of units	Annual Cost/Unit	Annual Revenues
Studio	\$850	\$1.70	70	\$10,200	\$714,000
1 Bedroom	\$1,000	\$1.33	122.5	\$12,000	\$1,470,000
2 Bedroom	\$1,700	\$1.42	157.5	\$20,400	\$3,213,000
Other	\$0	\$0.00	0	\$0	\$0
Totals			350	\$5,439,600	\$5,397,000

2. DIETARY / FOOD SERVICE INCOME

Type of Service	Total
Snack Bar: if 4 sales/hr. @ \$2 for 9 hrs x 312 days	\$22,464
Tray B'fasts: if 30 b'fasts/day @ \$2.50 for 6 days/wk	\$23,400
Cater Reqsts: if \$75 per week	\$3,900
Staff Meals: 50% FTE @ \$1.75/day x 168 staff	\$53,530
Guest Meals: if 72 guest meals per week at \$8 each	\$29,952
5% Extra Resident Meals: if \$8 each x 365 days	\$66,430
Total \$199,676	

3. NET MISC. INCOME

Item	Income/Month	Annual Incom
Pharmacy	\$2,000	\$78,000
Beauty Parlor	\$2,000	\$24,000
Branch Bank	\$500	\$6,000
Convenience Store	\$2,000	\$24,000
Total	\$6,500	\$132,000

162

10 YEAR OPERATING PROJECTIONS:

 (Before Tax Cash Flows)

OPERATING EXPENSES:

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Administration:	599,456	\$629,429	\$660,901	\$693,946	\$728,643	\$765,075	\$803,329	\$843,495	\$885,670	\$929,954
Dietary:	1,241,333	\$1,303,399	\$1,368,569	\$1,436,998	\$1,508,847	\$1,584,290	\$1,663,504	\$1,746,680	\$1,834,014	\$1,925,714
Housekpng/Laundry:	481,176	\$505,235	\$530,496	\$557,021	\$584,872	\$614,116	\$644,822	\$677,063	\$710,916	\$746,462
Maint./Security:	540,985	\$568,034	\$596,436	\$626,258	\$657,571	\$690,449	\$724,972	\$761,220	\$799,281	\$839,245
Nursing Facility:	3,302,699	\$3,467,834	\$3,641,225	\$3,823,287	\$4,014,451	\$4,215,173	\$4,425,932	\$4,647,229	\$4,879,590	\$5,123,570
Other(eg util's.):	2,425,786	\$2,547,075	\$2,674,429	\$2,808,150	\$2,948,557	\$3,095,985	\$3,250,785	\$3,413,324	\$3,583,990	\$3,763,189
	\$8,591,434	\$9,021,006	\$9,472,056	\$9,945,659	\$10,442,942	\$10,965,089	\$11,513,343	\$12,089,010	\$12,693,461	\$13,328,134

10 YEAR OPERATING PROJECTIONS:

 (Before Tax Cash Flows)

INCOME:

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Monthly Fees (1)	\$5,397,000	\$5,450,970	\$5,505,480	\$5,560,534	\$5,616,140	\$5,672,301	\$5,729,024	\$5,786,314	\$5,844,178	\$6,136,387
Diet'y & Food Srv	\$199,676	\$209,660	\$220,143	\$231,150	\$242,708	\$254,843	\$267,586	\$280,965	\$295,013	\$309,764
Misc.(Store, etc.)	\$132,000	\$138,600	\$145,530	\$152,807	\$160,447	\$168,469	\$176,893	\$185,737	\$195,024	\$204,775
	\$5,728,676	\$5,799,230	\$5,871,153	\$5,944,491	\$6,019,295	\$6,095,614	\$6,173,502	\$6,253,017	\$6,334,215	\$6,650,926

INCOME FROM TURNOVER OF UNITS

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Turnover of units:	3	4	6	12	16	17	19	20	21	21
New Aver. Fee:	\$457,500	\$640,500	\$1,008,788	\$2,118,454	\$2,965,835	\$3,308,760	\$3,882,927	\$4,291,656	\$4,731,551	\$4,968,129
Aver. Fee Refund:	(\$411,750)	(\$549,000)	(\$823,500)	(\$1,647,000)	(\$2,196,000)	(\$2,333,250)	(\$2,607,750)	(\$2,745,000)	(\$2,882,250)	(\$2,882,250)
Remarketing Cost:	(\$9,000)	(\$12,000)	(\$18,000)	(\$36,000)	(\$48,000)	(\$51,000)	(\$57,000)	(\$60,000)	(\$63,000)	(\$63,000)
Average Gain	\$36,750	\$79,500	\$167,288	\$435,454	\$721,835	\$924,510	\$1,218,177	\$1,486,656	\$1,786,301	\$2,022,879

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
NET OPERAT'G INC	(\$2,826,008)	(\$3,142,275)	(\$3,433,615)	(\$3,565,714)	(\$3,701,812)	(\$3,944,965)	(\$4,121,664)	(\$4,349,338)	(\$4,572,945)	(\$4,654,330)

*** Notes (1) monthly fees increase by 1% per year
 All other income and expenditures to grow by 5% per year
 Endowment or Entry Fee Refund is 90%
 Remarketing Costs \$3,000/unit

BIBLIOGRAPHY AND
SELECTED REFERENCES

Agron, G., Moore, M., *Health Care Facilities*. in "Facility Programming: Methods and Applications." edited by Wolfgang F.E. Preiser. Stroudsburg, Pennsylvania: 1978.

Branch, L.G., and Jette, A.M., *Understanding the Needs of People Over Age 70: Third Wave Findings*. Massachusetts Health Care Panel Study, Harvard Medical School, 1983.

Byrne, P., Cadman, D., *Risk, Uncertainty and Decision-Making in Property Development*. London: E. & F.N. Spon.

Edmondson, B., "Is Florida Our Future?" in *American Demographics*. The Dow Jones Company, Inc., June 1987.

Feder, J., Holohan, J., *Financing Health Care for the Elderly. Medicare, Medicaid, and Private Health Insurance*. Washington, D.C.: The Urban Institute, February 1979.

Gelwicks, Louis E., "The Building Program: A List of Spaces is Not Enough." in *Concern* June - July, 1975.

Gelwicks, L.E., Dwight, M.D., "Programming for Alternative Future Models." in *Congregate Housing for Older People: A Solution for the 1980's*. Edited by Robert D. Chellis, J.F. Seagle, Jr., Barbara Mackey Seagle. Lexington, MA: D.C. Heath and Company, 1982.

Good, R.L., Farrell, D.M., "Site Design For Retirement Housing - Part 1." in *Retirement Housing Report*. Boston: Federal Research Press, Volume 1, Number 5, January 1987.

Howell, S.C., "Daring to Explore and Appply: A Research Agenda for Congregate Housing." in *Congregate Housing for Older People: A Solution for the 1980's*. Edited by Robert D. Chellis, J.F. Seagle, Jr., Barbara Mackey Seagle. Lexington, MA: D.C. Heath and Company, 1982.

Hunt, M.E., Feldt, A.G., Marans, R.W., Pastalan, L.A., and Valko, K.L. *Retirement Communities: An American Original*. *Journal of Housing for the Elderly*, Volume 1, Numbers 3 & 4. New York: The Haworth Press, Winter 1983.

Jaffe, R.R., "Why Are So Many Retirement Housing Projects in Financial Difficulty." in *Retirement Housing Report*. Boston: Federal Research Press, Volume 1, Number 4, December 1986.

Kennedy, S.R., *Housing Options For The Elderly*. A report to the Massachusetts Housing Finance Agency. Boston, MA.: June 1985.

Lawton, M.P. *Environment and Aging*. Monterey, California.: Brooks/Cole Publishing, 1980.

Manton, K.G., and Soldo, B.J., *The Graying of America: Demographic Challenges and Socioeconomic Planning* *Journal of Socioeconomic Planning Sciences*, 1986.

Meister, S.W., "Market Research Roundup: Comparing Rental and Entrance Fee Facilities." in *Retirement Housing Report*. Boston: Federal Research Press, Volume 1, Number 8, April 1987.

National Center for Housing Managemament Inc., *Managing Housing and Services For The Elderly*. A Resource Book. Washington, D.C.: National Center for Housing Management, 1977.

Obenland, R.J., *Design Options for a Continuum of Care Environment*. a booklet prepared for the New England Non-Profit Housing Development Corporation. Concord, New Hampshire: August 1976.

Powell, A.V., MacMurtrie, J.A., "Continuing Care Retirement Communities: An Approach to Privately Financed Housing and Long Term-Care for the Elderly." in *Housing and Aging Society: Issues, Alternatives, and Policy*. Edited by R.J Newcomer, M.P. Lawton, T.O. Byerts. New York: Van Nostrand Reinhold Company Inc. 1986.

Preiser, Wolfgang F.E. editor, *Programming the Built Environment* New York: Van Nostrand Reinhold Company Limited, 1985.

Roche, R., "Debt Financing and Senior Living Facilities." in *Contemporary Long-Term Care*. Nashville, Tennessee: Advantage Publishing Inc., June 1987.

Roher, R.L. and Bibb, R. *Product Segmentation and Marketing Challenges in the Retirement Housing Industry* A paper written for the National Association of Senior Living Industries, April 1986.

Schneider, R.L., "Financial and Management Factors Affecting CCRCs' Long-Term Viability." in *Contemporary Long-Term Care*. Nashville, Tennessee: Advantage Publishing Inc., June 1987.

Sherwood, S., Greer, D.S., Morris, J.N., Mor, V., *An Alternative to Institutionalization. The Highland Heights Experiment. The Cushing Hospital Series on Aging and Terminal Care*. Cambridge, MA.: Ballinger Publishing Company, 1981.

Special Committee on Aging, United States Senate *Developments in Aging: 1986 Volume 1* Washington: U.S. Government Printing Office, 1987.

Special Committee on Aging, United States Senate *Developments in Aging: 1986 Volume 3* Washington: U.S. Government Printing Office, 1987.

Stoller, E.P., Stoller, M.A., "Propensity to Save Among the Elderly." in *The Gerontologist* The Gerontological Society of America, Volume 27, Number 3, 1987.

Streib, F.G., LaGreca, A.J., Folts, W.E., "Retirement Communities: People, Planning, Prospects." in *Housing and Aging Society: Issues, Alternatives, and Policy*. Edited by R.J Newcomer, M.P. Lawton, T.O. Byerts. New York: Van Nostrand Reinhold Company Inc. 1986.

Taplin, F.F., *Financing Continuing Care Retirement Communities: Alternatives for Proprietary Developers*
Master of Science in Real Estate Development Thesis,
Massachusetts Institute of Technology, Center for
Real Estate Development, Cambridge, MA.: August 1986.

Topolnicki, D.M., "The Broken Promise of Life-Care
Communities." in *MONEY* April 1985.

Urban Land Institute, *Housing for a Maturing
Population* Washington: Urban Land Institute, 1983.

Winklevoss, Howard E. and Powell, Alwyn V. *Continuing
Care Retirement Communities: An Empirical, Financial
and Legal Analysis*. University of Pennsylvania:
Published for the Pension Research Council by Richard
D. Irwin, Inc., Homewood, IL., 1984.

Zeisel, J., "Design Specialists in Retirement
Housing." in *Reirement Housing Report*. Boston:
Federal Research Press, Volume 1, Number 5, January