A MARKET STUDY AND FINANCIAL FEASIBILITY ANALYSIS
OF PERMANENT SUPPORTIVE HOUSING
FOR MENTALLY ILL HOMELESS INDIVIDUALS RESIDING IN
HUMBOLDT COUNTY, CALIFORNIA

by

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A Project
Presented to
The Faculty of Humboldt State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
In Social Sciences: Environment and Community

August, 2006
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ABSTRACT

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Master of Arts

This project focuses on an affordable housing model aimed at ending the homelessness of individuals who experience mental illness in rural Humboldt County, California. Although a range of human services and temporary housing programs are available, the lack of permanent supportive housing is identified as an unmet need of the homeless population (Redwood Community Action Agency [RCAA], 2004; Humboldt Housing and Homeless Coalition [HHHC], 2004). The purpose of this project is to conduct a market study and financial feasibility analysis on developing permanent supportive housing in Humboldt County. The project was conducted as part of an internship with Humboldt Bay Housing Development Corporation, a nonprofit housing development organization operating locally.

Two underlying questions are addressed by the project. (1) Does the demand for supportive housing outweigh the supply of existing programs aimed at supporting mentally ill homeless individuals in creating and maintaining a stable home in Humboldt County? (2) Is it likely that existing funding sources can be secured to cover the costs
associated with the development and ongoing operation of supportive housing in Humboldt County? The results of the market study and financial feasibility analysis were compiled into a technical report for the nonprofit organization. The following account of the project includes a theoretical framework and an overview of the methods and results. A discussion of the project results follows.
ACKNOWLEDGEMENTS

This project was made possible through the unending dedication and leadership of Elizabeth Conner, the Executive Director of Humboldt Bay Housing Development Corporation and my mentor. Her visionary spirit and willingness to go against the tide to innovate and find new ways to create and preserve affordable housing in California has strengthened individuals, families and the greater community. Thank you for your inspiration, for your dedication to not only building housing but also community, and for taking me under your wing.

I commend the founders and professors who were instrumental in creating the Environment and Community Program. I am humbled by the ideas and teachings of the professors and fellow cohort members involved in the program. Thank you for not losing sight of a sustainable balance between the complexities and intricacies of community and the natural environment.

Last but not least, I thank my family for their unconditional support throughout my experience as a graduate student. Mom, Brian and La: you are my inspiration to understand and practice selflessness. Dad and Claire: thanks for accepting the overeducated and underpaid. Paul T. James: I owe this degree to you. Thanks for rescuing me from cubicle-land and for reminding me to stop and appreciate the brilliance of the natural environment.
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INTRODUCTION

This project was conducted as part of an internship held with Humboldt Bay Housing Development Corporation (HBHDC), a nonprofit housing development organization operating in Humboldt County, California. The organization’s mission is to develop, acquire and manage housing affordable to very-low and low-income households – those earning 80% or less than the area median income. Since incorporating in 1993, the nonprofit developed and now manages 105 units of housing that are affordable to households with limited incomes. In response to an identified need for permanent supportive housing for the mentally ill homeless population residing in Humboldt County, the organization initiated a predevelopment study to understand the potential for developing such a model of affordable housing.

The permanent supportive housing model offers independent living situations linked to supportive services aimed at supporting individuals to remain housed. The supportive services are linked to the housing in that they are available to residents as part of the housing experience and are designed to support residents in ways that encourage housing stability. Although there are a variety of ways to structure the housing and supportive service operations, projects typically result from collaboration between the nonprofit housing sector and social service agencies.

This project consisted of carrying out the predevelopment study and was conducted over an eight-month period. The major tasks included:
• A market study of the indicators of demand for supportive housing and supply of existing housing programs for the mentally ill homeless population residing in Humboldt County;
• An examination of potential funding sources available for the development and operation of supportive housing;
• An identification and evaluation of vacant and existing motel sites suitable for new construction and rehabilitation projects;
• An analysis of supportive housing building design considerations to incorporate in a prototype project concept;
• An analysis of the financial feasibility of developing the prototype supportive housing project on the site identified as having the lowest development cost.

Two underlying questions are addressed by the project. (1) Does the demand for supportive housing outweigh the supply of existing programs aimed at supporting mentally ill homeless individuals in creating and maintaining a stable home in Humboldt County? (2) Is it likely that existing funding sources can be secured to cover the costs associated with the development and ongoing operation of supportive housing in Humboldt County? The results of the market study and financial feasibility analysis were compiled into a technical report for the nonprofit organization. The following chapters include a literature review and an overview of the research methods and results. A discussion of the project results follows.
This literature review takes a two-pillar approach to building a theoretical framework for the project. The first pillar provides context to the project as a task undertaken by nonprofit housing development organizations. To build this context, the literature review begins with an overview of the nonprofit housing sector and looks at the sector’s emergence as an integral component to the delivery of affordable housing in the United States. Next, an overview of common organizational characteristics and barriers encountered by most nonprofit housing development organizations reveals the significance of the project within the sector and for the greater community.

The second pillar provides context to the project as a predevelopment study on an affordable housing model known as permanent supportive housing. To underscore the significance of the housing model, an examination of the origins of supportive housing is provided. Next, the elements and outcomes that distinguish the model as an effective approach to housing people who encounter difficulty in achieving a stable home in the community are discussed. Then an overview of challenges of developing and operating supportive housing is also provided to balance the discussion. In essence, this literature review highlights how this project fits into the context of the nonprofit housing sector and underscores the significance of the project results.

**Nonprofit housing sector**

Nonprofits play a large role in the delivery of basic human and social services to Americans (Goetz, 1992). While some nonprofits provide services geared toward social
and environmental issues, nonprofit housing development organizations typically concentrate on community development through the creation of affordable housing and revitalization of the existing housing stock (Walker, 1993). Some nonprofit development organizations also take on activities such as community organizing and advocacy of neighborhood strategic interests (Walker, 1993). The main priorities found across the sector, however, include the production, revitalization and preservation of affordable housing (National Congress for Community Economic Development [NCCED], 1989).

In an assessment on community economic development, Vidal (1989) attributes the origin of the nonprofit housing sector in the 1960s to issue-oriented, community-based groups. The main issues addressed by the forerunners of the nonprofit housing movement included promoting community development objectives such as opposing gentrification, challenging local financial institutions to meet their community reinvestment obligations and demanding improved city services (Walker, 1993). Today, nonprofit housing development organizations are considered central to the delivery of housing that is affordable to limited income people (Schwartz, Bratt, Vidal & Keyes, 1996).

With over 2,000 nonprofit housing development organizations operating in communities throughout the United States, Walker (1993, p. 409) indicates that between 1960 and 1990, nonprofit development organizations produced an estimated 14 percent of all federally subsidized affordable housing units amounting to approximately 736,000 units. In order to understand the nonprofit housing sector’s current role in the creation and revitalization of affordable housing, it is important to understand what influenced the
emergence of the nonprofit housing sector. The following section examines how the
devolution of housing policy, the need for community-based solutions to housing issues,
and the emergence of an institutional support network influenced the emergence of the
nonprofit housing sector.

Emergence of the nonprofit housing sector

The federal government played a large role in influencing the emergence of the
nonprofit housing sector (Dreier & Atlas, 1996). In the first half of the 20th Century,
however, the nonprofit housing sector was nonexistent mainly due to the federal
government’s expanded role in housing. With the passing of the Housing Act of 1949,
federal housing programs were mainly centered on achieving urban renewal, growing
home ownership and the creation of public housing for people with limited incomes
(Lang & Sohmer, 2000). Then in 1968, the Fair Housing Act expanded the federal role to
include monitoring and reducing discrimination in housing.

Dreier and Atlas (1996) characterize federal policy during this period as
composed of a variation of themes primarily based on the idea that the federal
government could solve housing problems. Similarly, in an analysis of low-income
housing policy over the period from the Housing Act of 1949 to the 1973 moratorium on
housing production subsidies by the Nixon Administration, Orlebeke (2000) suggests that
the federal government was relied upon to “solve the nation’s housing problems through
the exercise of committed political leadership at the top and the implementation muscle
of a technically skilled, socially conscious bureaucracy” (p. 490). A major shift in federal
policy in the 1980s due to a change in presidencies, however, is marked as having directly influenced the emergence of the nonprofit housing sector (Goetz, 1993).

According to Bockmeyer (2003), federal spending on housing declined from a $30 billion budget in the late 1970s and 1980s to less than $8 billion in 1988. Such underfunding of housing led to critical shortages of affordable housing and ultimately lead to the demise of public housing (Dreier & Atlas, 1996). During this period of devolution, the federal government systematically transferred the responsibility for addressing housing issues to local governments. In response to this shift, local communities looked to community-based nonprofit housing development organizations to address the housing issues of people with limited incomes (Goetz, 1993; Dreier & Atlas, 1996; Keyes, Schwartz, Vidal & Brat, 1996; Bockmeyer, 2003).

The nonprofit housing sector also grew in response to contemporary problems (Goetz, 1992). One such problem included finding ways to preserve the affordability of 750,000 to 2 million low-income housing units in jeopardy of being converted out of the affordable housing stock due to expiring affordability requirements of federally subsidized loans (Clay, 1987; United States General Accounting Office, 1986; National Low Income Housing Preservation Commission, 1988; Goetz, 1992). Keyes et al. (1996) also suggests that the nonprofit sector’s social mission and commitment to helping the poorest offered a reliable alternative to addressing housing issues.

As communities looked to the nonprofit sector to address housing problems, one of the ingredients that has enabled the sector to act as effective participants in the delivery of affordable housing consists of an institutional support network (Keyes et al.,
The network comprises governmental, philanthropic, educational, and other intermediaries that provide essential financial, technical and political support to nonprofit housing development organizations. Ultimately, the support network legitimizes the role of the nonprofit housing sector by enabling individual organizations to fulfill the role of creating housing opportunities for people with limited incomes (Walker, 1993; Keyes et al., 1996).

In an examination of the relationship between nonprofit housing sponsors and the support network, Keyes et al. (1996) build an analytic framework for the network based upon the work of Robert Putnam and Walter Powell on the concept of social capital. Keyes et al. (1996) posit that the success of the nonprofit housing sector is largely a result of the institutional support network that embodies a hybrid framework inspired by “civic involvement with which Putnam is concerned and the institutional economic framework of Powell” (p. 210). Further, the authors suggest that the relationship between the nonprofit housing sector and the institutional support network is established on long-term relationships of trust and reciprocity, shared vision, mutual interest and financial nexus (Keyes et al., 1996).

Insomuch as the institutional support network enables the nonprofit housing sector to create and manage affordable housing, Bockmeyer (2003) suggests that such influence is representative of how a significant amount of policy making is conducted outside of the public sphere. Instead, objectives for affordable housing programs are determined in corporate boardrooms of foundations and other intermediaries that comprise a large portion of the institutional support network. Under this rationale,
Bockmeyer (2003) indicates that the public has limited access to participate in the delivery of housing to meet the needs of individuals with the greatest housing needs. The relationship between the nonprofit housing sector and the public sector, however, offers insight on the public’s influence on the delivery of affordable housing.

According to Goetz (1992), little systematic knowledge about the relationship between local governments and nonprofit housing development organizations exists. To fill the gap in knowledge, Goetz (1992) conducted survey research to better understand the ways local governments provide support for nonprofit housing development organizations. The results suggest that support for community-based housing or housing created by the nonprofit sector was, in part, a “political arrangement between local housing advocates and public officials” (Goetz, 1992, p. 428). In a synthesis of the findings, Goetz (1992) groups the observations into four models of arrangements between the public and nonprofit sectors. Based on a range of varying degrees of support, the models include: local-state sponsorship, partnership, community-based network and pre-organization.

In the model with the most organized support system, the local-state sponsorship model, Goetz (1992) found a system of on-going support in which funding and resources were channeled directly to the nonprofit sector. For example, the city of San Francisco, California channels direct funding support to cover the operating expenses of 11 nonprofit housing development organizations operating within the jurisdiction (Goetz, 1992). In the next level of arrangement, the partnership model, local private, public and nonprofits partner to provide affordable housing. In Boston, for example, the partnership
brings together the various entities addressing housing issues to create affordable housing (Goetz, 1992). In the model, the city and state provide project capital to the partnership. Goetz (1992) found less on-going operating support in the partnership model than the local-state sponsorship model.

The final two arrangements were noted for the lack of a formal or systematic relationship between the public and nonprofit sectors (Goetz, 1992). The arrangement found under the community-based network model such as that found in St. Paul and Minneapolis, Minnesota indicated an advocacy-based relationship in which housing advocates organize together around housing issues without direct support from the local government (Goetz, 1992). Under the pre-organization model, there are no arrangements between the public and nonprofit sector. As a result, nonprofit housing development organizations engage independently in housing issues with no direct support from an organized support system. Goetz (1992) found the pre-organization model relevant in the cities of New Orleans, Louisiana, and San Antonio, Texas.

Overall, the findings suggest that the models varied in three areas. First, the models varied in terms of unique organizational needs. Second, models varied in levels of organization among participants within the nonprofit sector. Third, the programmatic relationship between the nonprofit housing sector and local governments varied across the models (Goetz, 1992). A greater level of organization among the nonprofit sector indicates more influence on local housing policy and more forms of support for the needs of nonprofit housing development organizations (Goetz, 1992). To provide a better understanding of the needs of these organizations, the following section presents an
overview of common activities of nonprofit housing development organizations and the barriers encountered in creating and managing affordable housing.

Activities of nonprofit housing development organizations

Nonprofit housing development organizations exist in every major city and most small cities and rural communities throughout the nation (Goetz, 1992). The primary role of nonprofit housing development organizations throughout the nation is to deliver affordable housing (Schwartz et al., 1996). To fulfill this goal, nonprofits undertake development projects and conduct activities necessary to operate and preserve the affordable housing stock (Schwartz et al., 1996). The following discussion provides an overview of the housing development process and highlights the market and financial feasibility activities of the predevelopment phase. The property management function is also highlighted to underscore the activities undertaken by the nonprofit sector to operate and preserve the affordable housing stock.

According to Dewberry (1996), the development process entails determining the need for the project and conducting activities necessary to produce a project that is politically, economically and environmentally acceptable to the intended residents and the public. The main stages of development include: (1) predevelopment activities, (2) acquisition and construction, and (3) operation of the project over the long term (Hecht, 1996). The market study and financial feasibility analysis are integral components of the predevelopment process. The purpose of these activities is to arm developers with enough information to decide if the undertaking makes sense or not from separate but interconnected perspectives (Barrett & Blair, 1982).
Market studies provide information on past trends and current market conditions in order to predict ranges of potential land uses corresponding to rates of physical construction (Barrett & Blair, 1982). Demand for space in the market for real estate use comes from occupiers of space, which in turn depends on rent and other external economic factors such as income levels and number of households (DiPasquale & Wheaton, 1996). The market study encompasses an analysis of information such as income and expenses of comparable projects and demographic data to forecast how the determinants of demand and supply affect the project within a certain market area (Barrett & Blair, 1982).

According to Hecht (1996), the financial feasibility of affordable housing projects addresses two essential questions. First, can the costs of acquiring and developing the housing be reasonably secured from investors, grants and loans? And second, can the target population reasonably provide enough income to cover the ongoing costs of operating the units and maintain the debt service on the project? To answer these questions, information gathered throughout the market study provides developers with a basis to indicate the financial feasibility of a project (Hecht, 1996).

According to Hanford (1972), although the financial feasibility of a development is the primary concern, legal and performance elements are important considerations as well. Information collected throughout the predevelopment phase should provide an overview of the indirect and direct influences that may affect the proposed project from economic, legal, and performance standpoints, with the economic component as the primary consideration. Analysis of the legal feasibility of a project addresses issues
surrounding ownership structure such as liability, tax consequences and management control, codes affecting design and construction, and land-use regulations. Performance feasibility involves determining if the physical aspects needed to complete the development are readily available within a specified timeframe (Hanford, 1972). In theory, the legal and performance elements are analyzed in conjunction with the financial element to determine the overall feasibility of a project (Hanford, 1972).

The predevelopment phase is dynamic in that new information informs the decision makers throughout the process (Reynolds, 2001). In a simplified version of the affordable housing development process, if information indicates a positive outlook for an affordable housing project, the nonprofit housing development organization typically moves forward on securing financial commitments and then overseeing the construction phase of the project (Proscio, 2001). After a project opens, the operation and preservation of the affordable stock entails two separate but integral functions including property management and asset management (Schwartz et al., 1996).

The property management operation includes overseeing the day-to-day activities related to providing affordable housing. These activities include tenant eligibility screening, lease-up procedures, rent collection, enforcing lease arrangements, maintaining the grounds and ensuring the residents have a decent and safe environment to live in (Schwartz et al., 1996). The asset management function entails overseeing the financial and physical health of the development through long-term planning and regular monitoring of the financial and physical condition of the development (Schwartz et al., 1996). The asset management function is also concerned with ensuring that the day-to-
day operation is in line with fulfilling the long-term financial and physical health goals of the development (Schwartz et al., 1996).

In order to cover the costs associated with developing and operating affordable housing, substantial public and private investment is needed (Hecht, 1996). It is useful to categorize the sources of funds that support the delivery of affordable housing by the nonprofit housing sector into development funding and operating support. Development funding covers costs associated with the capital costs of acquiring, building and/or rehabilitating housing (Hecht, 1996). These costs typically fit into one of two categories consisting of soft and hard costs. Hard costs encompass costs associated with property acquisition, improving the property, environmental considerations, accessibility, and construction contingency for any unforeseeable construction costs (Hecht, 1996). Soft costs cover a broader range of costs including property transfer fees, professional fees, legal fees, environmental studies, appraisals, etc. (Hecht, 1996). Development funding is usually awarded in the form of deferred or low interest loans, grants, or equity. Equity funding sources such as tax credits usually anticipate a return on their investment.

Operating support covers costs associated with operating and/or maintaining housing (Hecht, 1996). These costs include property management, utilities, maintenance, insurance, security, debt service, and reserve funding for operating and replacements (Hecht, 1996). In market rate housing the income stream from tenant rents typically covers operating costs and provides revenue. In affordable housing, however, low rent levels require a rental subsidy to cover the gap between what the tenant can afford to pay and the cost of operating the housing (Shegos, 2001). According to Shegos (2001),
subsidies typically take the form of (1) a rental or operating subsidy and (2) capitalization of a reserve upfront to cover the gap in operating income.

In summary, the activities associated with the delivery and revitalization of affordable housing requires funding to support organizational administration, new project capital for predevelopment and development activities and for the long-term operation and preservation of the affordable housing. With limited funding allocated to affordable housing at the federal level, nonprofit housing development organizations must leverage federal funding with the myriad of programs administered by the public and private intermediaries that support affordable housing (Schwartz et al., 1996). As a result, affordable housing development projects are typically funded by multiple funding sources which resemble what Walker (1993) refers to as a “system of patchwork financing” (p. 204). In carrying out these activities, along with difficulties inherent in the mission of providing housing to those with the greatest housing needs, nonprofit housing development organizations encounter numerous barriers that impede the production of affordable housing. The following section provides an overview of the barriers facing the nonprofit sector as reflected in the work of Walker (1993), Schwartz et al. (1996), Dear (1992) and Lee (2004). Then a discussion on a widespread obstacle known as NIMBYism is provided.

Barriers to nonprofit affordable housing development

In a case study and secondary data analysis on the barriers to increased production of affordable housing, Walker (1993) found that nonprofit housing developers typically undercapitalized affordable housing projects in order to provide housing at rents
affordable to low-income people. By waiving important sources of income such as development fees, for instance, nonprofits often deal with shortfalls in operating revenues. Walker (1993) also found that the scarcity of funding available for affordable housing forces nonprofits to layer multiple funding sources, each with its own set of regulations and priorities, in order to adequately cover project costs. Walker (1996) found this process confusing and time consuming. The complexities of the financial packaging were also found in some cases to distort project size, design and use due to the assorted regulatory measures of each funding source.

Walker (1993) also found that risks involved in creating affordable housing included siting projects in declining housing markets. Because the nonprofits studied were found to have limited technical assistance and limited ability to spread risk, Walker (1996) infers that the private and public sectors are reluctant to participate in affordable housing. Additionally, Walker (1996) indicates that difficulty in measuring development effects constrains the nonprofit housing sector from gaining public and private support for projects. Because the effects of community development activities such as affordable housing production are “implicit, deferred and widely dispersed,” Walker (1996) suggests that such benefits justify public support to the extent that the public and private sector support the projects that produce the effects (p. 392). For instance, Walker (1996) observed strained relationships between the nonprofit housing sector and local public officials due to claims of community benefits with uncertain evidence.

Schwartz et al. (1996) provide a similar analysis on challenges the nonprofit housing sector encounters in producing affordable housing. The authors provide greater
emphasis on, however, the challenge that nonprofit housing development organizations encounter in preserving the housing through ongoing property and asset management functions. For instance, due to the complexities of funding, the authors found that nonprofit housing development organizations are faced with making sense of managing housing subject to multiple reporting requirements and tenant eligibility rules. However, because of limited operating budgets, the nonprofit housing sector is challenged with having little to offer property management staff in the form of salaries and benefits, which in turn leads to high turnover, minimal professional identity and the lack of recognition (Schwartz et al., 1996). In response to these challenges, Schwartz et al. (1996) argue that resources ought to be channeled to nonprofits for property and asset management support so as to ensure the existing affordable housing stock is not lost to the housing management challenges.

The perspective of a participant in the nonprofit housing sector offers insight into the barriers the sector encounters in delivering affordable housing to local communities. Lee (2004) offers such a perspective by sharing her experiences as an Executive Director of an affordable housing development organization known as the East Bay Asian Local Development Corporation (EBALD) operating in Oakland, California. With over 27 years of experience in community development work, Lee (2004) spent most of this time in the nonprofit housing sector. EBALD operates in an extremely dense and racially diverse community where the challenges to meet the housing needs of persons with limited incomes are many (Lee, 2004). Specifically, Lee (2004) cites the high costs associated with land acquisition, construction, insurance premiums, permitting fees and
other governmental requirements as significant barriers to affordable housing development. Another challenge includes greater competition for subsidy as participants in the nonprofit sector become more technically equipped and knowledgeable about the multitude of various funding sources needed to finance each project (Lee, 2004). In culmination of her observations and experiences of delivering affordable housing, Lee (2004) emphasizes the need for stronger collaboration among and across social, environmental, faith-based, civil society organizations and others to push through agreed upon issues and to work with those from multiple perspectives.

The final constraint discussed here is the concept behind the Not-In-My-Backyard (NIMBY) syndrome. NIMBYism is widely acknowledged as a severe limitation on the production of affordable housing (Dear, 1992). According to Wexler (1996, p. 91), the syndrome refers to an “organized and often emotional opposition to siting proposals by residents who believe that the proposed facility will result in negative impacts that will directly affect them”. In the case of housing for low-income persons, Dear (1992) suggests that individuals living in close proximity to the proposed site fear that the project will increase crime, decrease the quality of the surrounding location, and ultimately lower the values of the adjacent properties. According to a review of the research, however, the California Planning Roundtable (2002) found no studies that have ever shown reduced property values due to affordable housing and that design and use of public space have far more significant affect on crime than income level. Despite this research, the tactics of opposing parties, which include organized campaigns to gain support through media outlets, letter writing, and lobbying political officials in response
to perceived negative impacts, present a major obstacle to affordable housing development (Dear, 1992). When subject to such vigorous opposition, prolonged public approval processes increase development costs and can ultimately prevent the project from moving forward (Harkness, Newman, Galster & Reschovsky, 2004).

In response to the opposition, affordable housing developers must proceed judiciously throughout the siting process of affordable housing. Kaufman and Smith (1999) examine the types of frames common to land-use change conflicts and argue the importance of understanding such frames that affect the process and outcomes of the conflict. Accordingly, framing is a way of simplifying the world in order to reduce the amount of information processing necessary to comprehend what is around us (Kaufman & Smith, 1999). In a complex situation, as is usually the case with affordable housing projects, there is an increased likelihood that frames will be distanced from reality or overly simplistic. For instance, people living near the site of a proposed affordable housing project typically frame the situation in terms of risk to their safety of financial well-being (Dear, 1992). Others include zero-sum frames where gains for some equal losses for others and process frames where a group feels that their opinions were not accounted for in the decision-making process (Kaufman & Smith, 1999).

In such situations, Susskind and Cruikshank (1987) posit that taking into account the differences of all stakeholders is critical to building integrative agreements. By legitimizing the need for the project through community outreach efforts, Susskind and Cruikshank (1987) indicate an increased likelihood for obtaining project approval. Similarly, Dear (1992) proposes that community-based strategies such as educational
programs about the project, community advisory boards and those perceiving the greatest risk in some aspects of decision making will increase the likelihood of gaining support for the project. Whatever the strategy, the nonprofit housing sector must continue to seek ways to mitigate the NIMBY obstacle to affordable housing delivery.

Despite these barriers, the nonprofit housing sector continues to be an integral component to the creation and preservation of affordable housing. In the city of Arcata, California, for example, the nonprofit for which this project was conducted, plays an integral part in delivering affordable housing to people with limited incomes. Therefore, the above discussion is meant to provide an overview of the nonprofit’s role in the community and how this project fits in the process of delivering affordable housing. The following section provides context for the subject of this project through an analysis of the origins, elements, outcomes and challenges of permanent supportive housing.

**Supportive Housing Origins**

According to Proscio (2001), supportive housing is:

> permanent, independent, affordable housing for people with disabilities who are homeless or at risk of homelessness, where appropriate supportive services are provided as part of the normal operation of the housing, as a way of helping residents maintain the maximum possible level of independence, stability, and participation in the general community. (p. 1)

People with disabilities, as a group, have among the highest poverty rates, lowest average incomes, and highest out-of-pocket expenses (Batavia & Beaulaurier, 2001). Groups within the disabled population, especially people who experience mental illness, also
have a substantially higher risk of homelessness (Batavia & Beaulaurier, 2001). Therefore, as a group, when considering the limited income potential and the high risk of homelessness combined with a shortage of affordable housing in most communities, people with disabilities encounter extreme difficulty in achieving a stable living environment (Ridgway & Rapp, 1997). This project focuses on a model of affordable housing designed specifically to support persons who experience mental illness and housing instability to achieve a stable home in the community. The complexities behind mental illness, however, present a unique challenge for housing and social service providers to determine appropriate programs that support these individuals in obtaining and maintaining housing.

According to Ridgway and Zipple (1990), models of care backed by research and theory guide the mental health field. The models serve as operational templates and the basis to improve effectiveness of care for people experiencing mental illness. Under this premise, the residential services field, operating within the mental health system, was founded on a linear continuum with varying degrees of residential service and setting depending on client need. Beginning at the most intense level of service, clients gradually moved along the continuum as functioning levels improved and care needs decreased (Ridgway & Zipple, 1990). A guiding principle often associated with the linear continuum provided that housing stability was impossible until the patient or client received treatment and was deemed clinically stabilized (Tsemberis, Gulcur & Nakae, 2004; Gulcur, Stefancic, Shinn, Tsemberis & Fischer, 2003). Since the linear continuum’s inception, however, the residential services field experienced what Carling
(1990) describes as a “paradigm shift” away from residential services based on a clinical perspective to one that emphasized independence and choice as a primary means to achieve housing stability.

Blanch, Carling and Ridgway (1988) posit that the “supported housing” model, referred to in this project as “supportive housing,” acknowledges a link between having a stable home in the community and effective psychosocial rehabilitation of individuals with severe mental illness. This shift away from an emphasis on services delivered in a treatment setting established a program focused on supporting people with mental illness to create and maintain a stable home within their community. Under this model, people with disabilities such as mental illness are considered to have the potential for and the right to participate and be integrated into the community (Carling, 1990; Tsemberis et al., 2004; Gulcur et al., 2003). Accordingly, Ridgway and Zipple (1990) suggest that the home environment thus serves as a tool in the psychosocial rehabilitation process while immersing the client in an atmosphere typical to community settings and expectations.

Ultimately, the supportive housing model takes the individual experiencing mental illness out of the linear continuum and empowers her to choose and create her own home environment in a setting where independence is encouraged and access to supportive services is available (Carling, 1990). As such, the person lives in a housing setting geared for more independence as opposed to a non-normalized living arrangement such as group or congregate facilities (Ridgway & Zipple, 1990). Correspondingly, the relationship between service provider and client is transformed so that the client has control over daily activities and overall lifestyle (Ridgway & Zipple, 1990). Instead of
imposed structure on the client, service providers work with the client to determine mutually acceptable goals and activities. In doing so, levels of support are based on the unique needs of the individual and focuses on helping the person to succeed in the home environment for as long as necessary (Ridgway & Zipple, 1990, Tsemberis et al., 2004; Gulcur et al., 2003).

Since inception of the supportive housing concept, the model has garnered backing from social service providers, mental health advocates and consumers of mental health service (Ridgway & Rapp, 1997). The model is also the focus of major public and private funding programs. Despite the current emphasis on supportive housing, Lipton et al. (2000) suggest that the diverse needs of the mentally ill population may be better met by ensuring that communities offer a range of residential service models from a more clinical setting to a more independent setting. To understand the distinguishing features of supportive housing from various other residential service models, the following is a discussion of the elements of supportive housing.

**Elements of supportive housing**

According to Shegos (2001), supportive housing does not fit the definition of any one type of housing. Depending on the profile of the family or individuals served, supportive housing may consist of apartments, town houses or houses on a single site, scattered sites, or units scattered within a larger housing development (Shegos, 2001). In order to narrow the discussion to the model of supportive housing, which is the focus of this project, the following discussion is more pertinent to a single site supportive housing apartment complex for individuals who are homeless and disabled due to mental illness.
Since the 1890s, multifamily rental housing served as the predominant form of housing for the poor (Baar, 1992). In general, multifamily housing comprises multiple dwelling-units contained in one structure or grouping of structures. According to Follain (1994), the distinguishing features of multifamily housing as compared to other housing units include shared common space, less privacy and denser living. Tenants pay rent to the building owner in return for the rights to occupy a unit for a fixed period and under certain conditions specified in a lease (Follain, 1994). Today, multifamily rental housing continues to provide a low-cost method of delivering affordable housing to many low- and moderate-income households (Follain, 1994).

Single-site supportive housing for individuals provides the same features of multifamily housing. Because the target population has extremely low incomes, if any, Follain (1994) suggests that supportive housing developments typically have less private space and more common space in order to create a more affordable living situation. In general, supportive housing units are compact in size and similar to efficiency or single room occupancy (SRO) unit types (Lenoir, 2000). The primary element that distinguishes supportive housing, however, is that tenants who typically encounter difficulty in obtaining and remaining housed have access to an array of supportive services that target housing stability as an integral component of the housing operation (Hannigan & Wagner, 2003).

In an analysis of early research on supportive housing, Ridgway and Rapp (1997) found that in addition to the supportive services, the active ingredients of the housing model include (1) rental subsidies, (2) consumer choice over assigned housing
Supportive housing is also commonly referred to as having three integral components. Shegos (2001), for example, defines supportive housing as the combination of affordable housing, supportive services and community. Reynolds (2001), on the other hand, distinguishes supportive housing as the result of three very different disciplines including housing development, supportive services and property management. To build upon Reynolds’ (2001) perspective, the following analysis provides an overview of the three main elements and the relationship between each component.

The housing development component of supportive housing is commonly undertaken by the nonprofit housing sector (Shegos, 2001). The development process, as with most affordable housing development projects, typically encompasses three stages including (1) predevelopment, (2) acquisition and construction, and (3) operation of the project over the long term (Hecht, 1996). The principal participants in a supportive housing development project include: the owner of the building, the developer, the support service provider, the property manager and the tenant representatives (Reynolds, 2001). Depending on experience and available resources, organizations often take on more than one role. For instance, the social service provider may also assume the building ownership role. Few organizations, however, have adequate capacity and experience to undertake the entire project alone (Shegos, 2001). As a result, supportive housing projects are typically the result of collaborative efforts between organizations
working in the respective fields of affordable housing development, social services, property management and tenant advocacy (Reynolds, 2001).

The property management element of supportive housing is similar to what Schwartz et al. (1996) refer to as the operation and preservation of the affordable stock, which consists of two separate but integral functions, property management and asset management. Supportive housing property management is unique in that the coordination of property management operations with the supportive services delivery requires careful attention. Reynolds (2001), for instance, stresses that philosophical difference inherent in property management and social service functions raise a dilemma surrounding the distinct responsibilities and standards upheld by each function. The property management operation, for example, primarily functions to optimize the property’s performance by maintaining high occupancy rates, collecting rent on a regular basis and enforcing lease arrangements. In contrast, the social services program primarily functions to maximize human service goals by tailoring services to meet the needs of each unique individual (Reynolds, 2001). At times, the prospect of fulfilling one function could compromise the other. Therefore, finding an appropriate balance to fulfill both property management and social services functions requires clearly delineated polices and procedures that serve to coordinate the functions and that comply with confidentiality, fair housing and civil rights laws (Corporation for Supportive Housing [CSH], 2003).

In a review of best practices and lessons learned to date by housing and service providers participating in a network of housing and integrated service programs, Lenoir (2000) found that cross training staff on the various issues and responsibilities is integral
to coordinating the roles. For example, cross training property management staff in health and social issues faced by the target population and service providers in landlord-tenant laws helps staff members to understand the complementary, but distinct roles of each function. Lenoir (2000) also stresses the importance of regular and open communication between property management and service providers. For example, weekly staff meetings that address lease violation issues can help the property management staff and service providers to determine suitable types of services and strategies that could support the individual to remain housed (Lenoir, 2000). Ultimately, Lenoir (2000) suggests that careful coordination of the property management and supportive service functions leads to more successful supportive housing outcomes.

According to Hannigan and Wagner (2003), the supportive service element of supportive housing consists of services that are accessible, flexible and target housing stability. Furthermore, participation in the services is not a condition of the housing. Depending on the profile of the population served, a service plan that identifies service types, delivery, staffing, and proposed funding sources is an integral component to supportive housing (Hannigan & Wagner, 2003). According to Reynolds (2001), the service plan provides a comprehensive overview of the supportive service program that will be implemented as part of the normal operation of the housing. Services offered typically focus on mental and physical health issues; however, others target housing stability including daily living skills such as paying rent on time and maintaining a clean and safe living environment, counseling on assistance program benefits and application procedures, and peer-to-peer mentoring and support and crisis intervention (Hannigan &
Wagner, 2003). Ridgway and Rapp (1997) found that successful supportive housing programs were found to have consistent availability of service providers and a typical staff to client ratios of about one to eight or one to ten. The next section provides an analysis of the outcomes associated with supportive housing.

Supportive Housing Outcomes

The outcomes associated with supportive housing are backed in the literature by a range of studies providing evidence to guide mental healthcare providers and affordable housing providers to meet the needs of their community. Although evidence on the effectiveness of supportive housing is somewhat limited, three categories of research substantiate supportive housing as a valuable community asset. The research categories include consumer preferences for independent living, housing outcomes, and impacts on associated costs (e.g.: Culhane, Metraux & Hadley, 2002; Gulcur et al., 2003; Rog, 2004; Tanzman, 1990; Tsemberis et al., 2004, Yeich, 1993).

The literature that focuses on preferences for independent living suggests that individuals experiencing mental illness are consumers of mental health and housing services (Carling, 1990). In line with this assertion, Carling (1990), along with Tanzman (1990) and Rog (2004), found that most consumers prefer to live in a housing setting geared for more independence rather than in congregate or group home settings. Furthermore, Harkness, Newman, Galster and Reschovsky (2004) suggest that research continues to surface on beneficial mental health outcomes in relation to housing stability and independence within the community. Ridgway and Rapp (1997) found other positive outcomes in non-experimental studies that suggest individuals living in supportive
housing may decrease psychological symptoms, increase social and interpersonal functioning and experience improved physical health. Furthermore, the research suggests that for some individuals, the outcomes of supportive housing are associated with improved life satisfaction and overall quality of life (Ridgway & Rapp, 1997).

Housing outcomes are associated with the effect programs have on reducing homelessness, stabilizing housing tenure, and improving the overall quality of life for individuals (Lipton, Siegel, Hannigan, Samuels & Baker, 2000). Studies on the various models of supportive housing suggest that the housing outcomes for mentally ill individuals are positive (Rog, 2004; Lipton et al., 2000). For instance, Ridgway and Rapp (1998) found that outcomes associated with supportive housing include reductions in housing instability and homelessness. Similarly, in a study on the long-term effectiveness of approaches to housing homeless persons with serious mental illness, Lipton et al. (2000) found that homeless persons with serious mental illness can achieve the positive residential outcomes purported by backers of supportive housing. Culhane, Metraux and Hadley (2002) also suggest the existence of a relatively large pool of homeless persons with serious mental illness for whom supportive housing is effective in achieving housing stability. Rog’s (2004) review of the evidence base for supportive housing also found that sufficient research indicates, “supportive housing has its greatest effects on residential outcomes” (p. 342). Moreover, existing research indicates that supportive housing produces positive housing outcomes.

Supportive housing outcomes are also associated with reduced use of “collateral services” such as emergency shelters, public and private hospitals and correctional
facilities (Culhane, Metraux & Hadley, 2002). In an assessment on the impact of public investment in supportive housing, Culhane, Metraux and Hedley (2002), examine the potential for such an investment to decrease usage of other social services, thus implying a cost savings. The results indicate that a positive impact is realized through the reduction in costs associated with shelter use, hospitalizations, length of stay per hospitalization, and time incarcerated after placement of mentally ill homeless persons in supportive housing (Culhane, Metraux and Hadley, 2002). Taking a slightly varied look at similar impacts, Salit, Kuhn, Hartz, Vu, and Mosso (1998) value preventable costs associated with homelessness at $100 million per year in most metropolitan areas. Information on impacts in rural communities, however, was not available. In terms of the costs associated with delivering supportive housing, Rog (2004) indicates that when compared to congregate models of housing for people with mental illnesses, the supportive housing model offers a less expensive alternative. As this discussion indicates, supportive housing offers an effective housing alternative for people who encounter difficulty in obtaining a stable home in their community. The literature suggests that outcomes evidenced by consumer preferences for independent living, reductions in homelessness and impacts on associated costs indicate that supportive housing is an asset to communities.

**Challenges of Supportive Housing**

In addition to the barriers associated with the delivery of affordable housing, supportive housing presents a different set of challenges. Harkness et al. (2004) indicate risks involved in operating supportive housing stems from a reasonable expectation that housing developed for mentally ill persons has greater potential to encounter community
opposition, higher financing costs, higher turnover and vacancy rates, and additional maintenance costs. In a study that compared the financial profiles of 153 properties developed for persons with serious mental illness, however, Newman, Harkness, Galster and Reschovsky (2001) found that despite the need for more management attention in housing developed for mentally ill persons, there was no substantial difference between the financial viability of housing developed for mentally ill persons and comparable housing developed for low-income tenants who are not mentally ill. A key challenge, however, involves managing an operating budget not only for the housing operation, but also for the supportive services operation as well.

Reynolds (2001), for instance, emphasizes the importance for sponsors of supportive housing projects to be conscious of the fact that the “physical and financial viability of the project over time is just as important as providing quality supportive services” (p. 35). In order to provide supportive services, adequate funding sources must be secured not only for the operation of the housing, but also for the supportive services throughout the life of the project. Other challenges stem from issues surrounding the collaboration among project sponsors, property management and supportive services providers.

In the early stages of planning and development of a supportive housing project, Reynolds (2001) stresses the need for clearly delineated roles and responsibilities of the principal participants. Formal agreements that clearly specify roles and responsibilities of each participant in a project prior to even the earliest stages of planning will avoid confusion and ineffective working relationships (Reynolds, 2001). Similarly, carefully
coordinated property management and supportive services functions are also key to the success of a supportive housing project as discussed earlier in this chapter (Reynolds, 2001). In essence, the challenges of developing and operating supportive housing are wide-ranging. Because projects are typically the result of a collaboration of participants, careful attention to planning and coordinating the objectives, roles and responsibilities at each stage of the project’s development is critical.

Conclusion

This literature review provides context to the project as a task undertaken by nonprofit housing development organizations. The context is built upon an overview of the nonprofit housing sector’s role in the delivery of affordable housing for people with disabilities and limited incomes in communities throughout the United States. A narrower look at permanent supportive housing reveals the significance of the project, which seeks to better understand the local market conditions and the financial feasibility of developing a supportive housing project in Humboldt County. Ultimately, this literature review highlights how this project fits in the context of the nonprofit housing sector and underscores the significance of the project’s outcomes. The next chapter provides an overview of the methods implemented for the project.
RESEARCH METHODS

The research conducted for this project consisted of two interrelated components. The first component consisted of a market study. The results of the market study were then incorporated into the second component consisting of a financial feasibility analysis. The results of both components were then incorporated into a technical document for the nonprofit housing development organization. The following is an overview of the research methods followed for each component of the project.

Market Study Research Methods

The research method implemented for the market study consisted of secondary data analysis on indicators of demand for supportive housing and supply of existing programs aimed at supporting mentally ill homeless individuals in creating and maintaining a stable home in the community. The demographic and social trends considered in the analysis included those relevant to Humboldt County, California. Incorporated areas were not considered in this analysis.

The secondary data sources included the following:

- United States Census Data (2000)
- Building Communities: Dyett & Bhatia (2002)
- California Department of Finance (2005)
The demographic and social trends analyzed included existing data on total population and specific data on the disabled population residing in Humboldt County. Other demographic trends examined included existing data on household income, industry and employment trends.

An analysis of the supply of existing housing programs looked at how a proposed project would compare to the competition and what competitive advantage or disadvantages could apply. Existing data on the overall affordable housing supply in Humboldt County and existing housing programs available to the homeless population were analyzed. Market area demand was analyzed based on existing data on the overall homeless population. Data and projections on the extent of the homeless population that is disabled due to mental illness were also analyzed. Overall, the market study provided information on the indicators of supply and demand for supportive housing to supplement the financial feasibility analysis.

Financial Feasibility Analysis Research Methods

The financial feasibility analysis incorporated the results of the market study and included activities necessary to answer the following two questions: (1) can the available funding be reasonably secured to cover the costs associated with acquiring and developing a supportive housing project and (2) will the target population reasonably
provide enough income to cover the ongoing costs of operating the units and maintaining the debt service on the project? To answer these questions, the following activities were conducted:

- An examination of potential funding sources available for the development and operation of supportive housing;
- An identification and evaluation of potential vacant and existing motel sites suitable for new construction and rehabilitation projects;
- An analysis of supportive housing building design considerations to incorporate in the development of a prototype project; and
- An analysis of the financial feasibility of developing the prototype supportive housing project on the site identified as having the lowest development cost potential.

The following is a summary of the research methods implemented for each activity.

Examination of potential funding sources

The examination of potential funding sources included a review of existing funding program announcements, technical assistance financial guides, funding profiles of existing programs and current Notices of Funding Availability. Because supportive housing projects require funding for development activities, operating expenses and supportive services, the research focused on public and private funding sources for affordable housing and for social and mental health related activities. A summary of relevant funding sources was compiled into a funding matrix categorized by the funding type including capital sources for development, operating sources for the operation of the
housing, supportive service funding and programs that provide funding for all activities related to supportive housing.

Identification and evaluation of potential vacant and existing motel sites

The identification of sites for new development and rehabilitation projects was conducted through a review of existing reports on land and motel inventory in combination with an analysis on parcel data. The geographic areas considered in this analysis included the Community Planning Areas (CPA) of Eureka, Arcata and McKinleyville. The CPAs are located adjacent to existing incorporated areas and typically have lower infrastructure needs. These areas are also located outside of the coastal zone. For these reasons, these areas are associated with lower development costs due to lower infrastructure needs and permitting requirements.

The process for identifying suitable sites consisted of extracting parcels from two data sets based on the extent each parcel or group of adjacent parcels met the following site criteria:

- Location: Community Planning Areas of Eureka, Arcata and McKinleyville
- Zoning: R-4
- Minimum Lot Size: 5,000 SF
- Maximum Lot Size: 2 acres
- Proximity to Public Transportation: 2 miles

Parcels that met the site criteria were extracted from a database maintained by the County Planning Division’s Geographic Information Systems (GIS) Department and the Planning Division’s Interactive Housing Inventory Mapping System (IHIMS). The identified sites
were then evaluated for development potential through site visits and recordation of variables affecting development costs. Each site was then ranked based on estimated development costs and proximity to services frequented by the target population.

The ranking process consisted of assigning a value to each site characteristic based on an estimation of cost to prepare the site for development and the extent of correspondence to the predefined development parameters. A lower rank indicated lower site preparation costs and higher overall correspondence to the development parameters. The site identified as having the lowest development cost potential was then incorporated in the financial feasibility study based on a prototype supportive housing project layout.

Analysis of supportive housing building program design considerations

The prototype project layout was developed based on information uncovered in a review of literature on design considerations. A synopsis of the findings was incorporated into the report and used to develop the prototype project layout suitable for the site identified as having the lowest development cost potential. The prototype layout consisted of a breakout of building components such as private and common spaces and sizes of each component. The prototype layout maximized the development potential of the identified site based on the site size, surrounding land use characteristics and requirements under the zoning designation.

Financial feasibility analysis

As part of the financial feasibility analysis, a series of related pro forma financial statements based on projected sources and uses of funds during the development and operating phases of the prototype project were created. Development pro forma financial
statements consist of expenses associated with development activities including property acquisition. A market comparison approach was used to estimate the value of the identified site. Because the pool of similar properties sold within the last year was limited, the analysis looked at sales over the last three years of vacant land zoned residential and located in the city of Eureka, the County and the city of Fortuna. A slight upward adjustment was made due to unknown conditions on sales and differences in physical characteristics of the comparable properties.

Development expense estimates were based on a survey of general contractors and adjusted for prevailing wage standards specified under the Davis-Bacon Act. Costs associated with environmental assessments necessary to meet standards set by the National Environmental Protection Act (NEPA) and the California Environmental Quality Act (CEQA) were based on the cost estimates obtained from a survey of environmental engineers and based on costs needed to remediate a parcel with average environmental contamination issues. Although some communities offer incentives in the form of streamlined permitting procedures, reduced impact fees, and density bonus programs for affordable housing development, it was unknown if such incentives would be awarded for the supportive housing project. In light of this, permitting and impact fees were estimated based on talking with County planners.

Due to unknown factors that could influence the cost of construction materials (hard costs) or fees associated with completing the project (soft costs), contingency costs were estimated at 5% of hard and soft costs respectively. If contingency is set too low, developers could easily encounter funding shortfalls upon slight changes in market
forces. A conservative contingency percentage was used in this analysis and is typical for construction projects using public funding. To mitigate risk associated with income shortfalls, rent and operating reserves of 15% and 10% respectively were used in this analysis. All other costs were estimated based on talking with industry professionals and estimates incorporated in other affordable housing development projects.

The operating pro forma provides an overview of the income and expenses over a five-year operational period of the prototype project. The income from the property includes rents from tenants. Because tenants occupying the supportive housing units will not pay more than 30% of their monthly income based on funding program requirements, an additional rent subsidy was incorporated as part of the rental income. Rents were based on the U.S. Department of Housing and Urban Development’s (HUD) 2006 rent limits. Other operating expenses were based on current expenses of the nonprofit organization’s current stock of affordable housing. Expenses for the supportive services were included as a separate pro forma and based on case management costs incurred by local social service providers. The pro forma was separate from the housing operating pro forma due to funding program requirements.

The sources pro forma was based on the potential funding that could be reasonably secured for the prototype project. Sources were selected based on the funding needs of the prototype project and funding program objectives. A subsidy analysis based on funding requirements determined appropriate amounts of private and public funds necessary to cover development and operating costs. These financial statements were then analyzed to determine if available funding could be reasonably secured to cover the
costs associated with acquiring and developing the prototype supportive housing project and if projected income from the project could cover the ongoing costs of operating the project.
RESULTS

The results of this project indicate that: (1) the demand for supportive housing outweighs the supply of existing programs aimed at supporting mentally ill homeless individuals in creating and maintaining a stable home in Humboldt County and (2) it is likely that existing funding sources can be reasonably secured to cover the costs associated with the development and ongoing operation of supportive housing in Humboldt County. The following synopsis provides an overview of the market study and financial feasibility results.

Market Study Results

Demographic and social trends in Humboldt County

The California Department of Finance [CDF] (2005) estimates the current population of Humboldt County at 131,334 persons. The population is projected to increase by 9.71% over the twenty year period between the year 2000 and 2020 (CDF, 2005). The majority of the population resides in an area surrounding Humboldt Bay, including the most populous incorporated cities of Eureka, Arcata, and the largest unincorporated community of McKinleyville. The unincorporated areas account for more than half of the County’s total population (Dyett & Bhatia, 2002).

The median household income of Humboldt County is $31,226 per year, whereas the median household income of the state of California is $51,185 (U.S. Census, 2000). Twenty four percent of the total number of households residing in the County earns less
than $15,000 and 6% receive public assistance income (U.S. Census, 2000). Twenty percent of the Humboldt County population lives below the federally designated poverty threshold of $8,789 per year, whereas 14% of individuals live below the poverty level throughout the state of California (U.S. Census, 2000).

The State Department of Mental Health (2006) estimates that 300,000 persons are homeless of whom 50,000 have a serious mental illness throughout California. In Humboldt County, an unduplicated "point in time" count found 273 individuals residing in temporary housing including emergency shelters and transitional housing (HHHC, 2004). The same count found 1,007 persons living in unsheltered areas not meant for human habitation (HHHC, 2004). Although it is difficult to ascertain the extent of mental illness and other disabilities among homeless persons, research suggests that the prevalence of drug, alcohol, and mental health problems is substantially higher than in the general adult population (Burt, Aron & Lee, 2001). Of the sheltered homeless population counted in Humboldt County, subpopulations included 110 chronically homeless, 189 severely mentally ill and 182 chronic substance abusers (HHHC, 2004). Estimates of the unsheltered subpopulations were not available. The HHHC (2004) also estimates that 20% to 25% of the total homeless population residing in Humboldt County has a severe mental illness such as schizophrenia and other major affective disorders.

These demographic and social trends suggest the existence of a relatively high incidence of poverty and a large population of homeless individuals in Humboldt County. Because the lack of affordable housing is considered one of the causes of homelessness, an understanding of the affordable housing situation in Humboldt County underscores the
need for supportive housing. The next section examines the indicators of the affordable housing situation in Humboldt County.

**Affordable housing in Humboldt County**

A generally accepted standard of housing affordability is housing that costs no more than 30% of a family's income (Pelletiere, 2006). Families that pay more than 30% on housing are considered cost burdened in that their ability to purchase other necessities such as food, clothing and health care is negatively impacted (HUD, 2006). According to a report produced by the Joint Center for Housing Studies of Harvard [JCHSH] (2004) half of the lowest-income households living in the United States spend at least 50% of their incomes on housing. The same report indicates that the affordability pressures are unlikely to decline as incomes remain relatively stable and housing costs continue to increase (JCHSH, 2004).

According to the Technical Background Study for the 2003 Humboldt County Housing Element (2004), there is currently a dramatic shortage of housing that is affordable to households with limited incomes. The same report indicates that projected rates of affordable housing construction will not meet the County's need (Humboldt County, 2004). The constraints that limit the likelihood of meeting the affordable housing needs include: inadequate amount of developable vacant residential land; the lack of necessary infrastructure to support residential development; and the increase in per unit housing costs of construction (Humboldt County, 2004).

Another indicator of the affordable housing shortage is represented in data maintained by the National Low Income Housing Coalition [NLIHC] (2006), which
indicates that 59% of renter households are unable to afford the two-bedroom Fair Market Rent (FMR) of $701. The data further indicate that minimum wage is not enough to support housing costs in Humboldt County – a household must earn at least 152% of minimum wage or $10.25 per hour to afford a one-bedroom apartment renting at the FMR of $533 (NLIHC, 2006). As the above indicators suggest, there is a shortage of affordable housing in Humboldt County. The following section discusses existing housing programs in Humboldt County.

**Existing housing programs in Humboldt County**

There are currently two existing scattered site supportive housing programs offered in Humboldt County. The programs operate under a master-lease arrangement where a social service agency assists homeless clients in obtaining housing. Landlords willing to house the client agree that the social service agency will assume the responsibilities provided in the lease on behalf of the client. It is also agreed that the social service agency will actively link the client to ongoing case management and other services necessary to support the client in remaining housed. The two programs currently serve 16 persons under the master-lease arrangements (HHHC, 2004). According to the HHHC (2004), however, there is an unmet need of 601 permanent supportive housing units for individuals.

Although similar to single-site supportive housing, the master-lease programs differ in two significant ways. First, the bricks and mortar development of a single-site project is a product of the philosophy and mission of the collaborative partnership between the developer, owner and service partner. Design considerations suitable for the
target population and effective service delivery are incorporated into a single site development whereas the master-lease programs are administered in existing buildings that are typically not equipped for service delivery. Second, the service program and property management operation in a single site project are developed and coordinated to fulfill the project’s mission. In the master-lease situation, the service program is developed within the framework of an existing property management operation. These observations indicate a competitive advantage in terms of outcomes for a single-site supportive housing project.

Other housing programs available to homeless individuals in Humboldt County include emergency shelters and transitional housing. Emergency shelters offer short-term housing to homeless people on an on demand and subject to availability basis. Transitional housing is another form of temporary housing where the program acts as an anchor for services coordination and to identify the strategies needed to manage the barriers and challenges of maintaining permanent housing (RCAA, 1996). There are 221 emergency shelter beds and 123 transitional housing beds for individuals in Humboldt County (HHHC, 2004). An additional 121 beds for individuals are currently under development. While these programs could impact the demand for single site permanent supportive housing, it is unlikely because these programs offer temporary housing arrangements. Supportive housing, on the other hand, provides permanent housing.

**Market study conclusions**

The market study reveals a gap between existing housing programs and the demand for housing linked to services aimed at supporting individuals experiencing
mental illness in creating a stable home in the community. The demographic and social
trends indicate relatively high levels of poverty and homeless individuals who are
disabled due to mental illness. A review of the affordable housing situation in Humboldt
County indicates a dramatic shortage of housing that is affordable to households with
limited incomes. Furthermore, housing programs serving individuals who are currently
homeless are unable to meet the demand for housing arrangements that are affordable,
permanent and linked to supportive services.

The market study indicates an unmet need of 601 permanent supportive housing
units for homeless individuals. With roughly 500 homeless individuals who experience
mental illness, or 25% of the total homeless population, the results clearly indicate a
demand for permanent supportive housing for the mentally ill homeless. Although the
financial feasibility analysis provides a better indication of an optimal number of units for
a given site, the market study reveals a lack of supportive housing experience of the
nonprofit housing and social service sectors. To facilitate a more manageable entrance
into the market, a small scale supportive housing project is more suitable for the County.
Preliminary estimates from social service agencies indicate that a project of up to 20 new
supportive housing units at one site could be manageable for the social service sector.
This preliminary estimate, however, requires a more in depth look at the income and
expenses of the project.

The market study also reveals a need for regular affordable housing units - those
not linked to supportive services. A project, therefore, could conceivably combine
supportive housing units with housing units that are affordable, but not linked to
supportive services. The non-supportive housing units could provide needed affordable housing and additional rental income to support the operation of the project. Overall, the market study validates the need for supportive housing and identifies an opportunity to create a project that combines regular affordable housing with supportive housing. The following section provides an overview of the financial feasibility analysis.

Financial Feasibility Analysis Results

Examination of Available Funding Sources Results

Affordable housing requires substantial public and private investment in order to develop and operate housing that households earning limited incomes can afford without compromising their ability to pay for other items such as food, clothing and health care. In typical affordable housing development projects, sources of funding cover costs associated with acquiring and developing the property and the costs of operating and maintaining the housing (Hecht, 1996). In contrast, supportive housing requires additional funding to cover social services that are provided as part of the normal operation of the housing (Bristol & Greiff, 2004).

Most public funding programs also require leveraging of funds with other matched sources. For instance, the Supportive Housing Program requires a 25% match for operating and 20% match for service funding (HUD, 2006). Partnerships established with existing service providers willing to commit certain services to the project constitute a matched source. Consequently, the funding structure typically involves a complex financial structure comprising multiple sources (Walker, 1993). The following section
provides an overview of funding types and programs available for supportive housing development activities such as land acquisition and construction, operating support, and social services.

The main types of assistance include the formula and competitive grant programs. Formula funding is allocated from the federal government to local jurisdictions based on a formula that takes into consideration demographic and service needs of a given area (Bristol & Greiff, 2004). Typically, the federal government sets eligibility and qualifying activities while allowing local jurisdictions to set specific funding strategies. Funding recipients generally have the option of using or sub-granting funds to project sponsors typically selected through a competitive process. Formula funding is attractive because the funding tends to be more flexible, ongoing and renewable (Bristol & Greiff, 2004). The biggest challenge, however, is gaining access to the funding, which often requires educating and building strong relationships with local administering agencies (Bristol & Greiff, 2004).

Competitive grant funding is allocated to applicants selected through a competitive process. Administering agencies such as public entities and private foundations set funding priorities and typically award specific projects that fall within the established priorities. Funding is often allocated for a fixed time period and is generally non-renewable. The benefit of competitive grant funding is that the funds are often easier to access (Bristol & Greiff, 2004). This type of funding is typically not a good source for ongoing support for operating and supportive services (Bristol & Greiff, 2004).
Funding for supportive housing is available through formula and competitive funding from a variety of programs with various objectives and regulatory requirements. There are few programs that offer comprehensive funding for development, operating costs and support services. Therefore, it is important to understand the various programs, respective target populations, eligible activities and reporting requirements so that a funding package can be tailored to suit the project needs (Bristol & Greiff, 2004). The following section briefly describes what development, operating and supportive services programs typically fund.

Only a few funding programs designed to support the overall costs associated with supportive housing development and operation exist. HUD offers funding through the Supportive Housing Program (SHP), which covers costs associated with development, housing operation, and supportive services. Applicants that are actively involved in a local Continuum of Care planning process have a competitive advantage in access to funding. Alternatively, some programs provide funding for housing development and costs associated with operating housing, but do not offer funding for supportive services. The HOME program and the Supportive Housing for Persons with Disabilities (Section 811) administered by HUD, for instance, do not allocate funding for services and are meant to be leveraged with other funding programs. Other all-inclusive funding programs include the Community Development Block Grant program (CDBG) and the California Multifamily Housing Program (MHP). The CDBG program is competitive within a formula allocated to Participating Jurisdictions. Funds can be used for development, certain service expenses and program administration. Similarly, the
California MHP program can be used to cover costs associated with development and coordination of support services; however, the program also allows capitalization of project operating reserves.

All-inclusive programs aimed at improving mental health services provided to homeless individuals include the Integrated Services for Homeless Adults with Serious Mental Illness programs enabled by Assembly Bill 34 (further expanded by AB 2034) and the Mental Health Services Act (MHSA/Proposition 63). Under AB 2034, state funding was allocated to counties for the purpose of providing services to homeless adults with serious mental illness including supportive housing and other integrated services. Although the majority of AB2034 funds have been allocated to existing programs, there is still a possibility that funding could be accessed through partnerships established with the County. Funding priorities provided by the MHSA are not yet finalized; however, MHSA funding is expected to provide a reliable source of funds for supportive housing projects.

Development costs typically fit into one of two categories consisting of soft and hard costs. Hard costs encompass costs associated with property acquisition, improving the property, environmental considerations, accessibility, and construction contingency for any unforeseeable construction costs. Soft costs cover a broader range of costs including property transfer fees, professional fees, legal fees, environmental studies, appraisals, etc. (Hecht, 1994). Development funding is usually awarded in the form of deferred or low interest loans, grants, or equity (Bristol & Greiff, 2004). Equity funding sources usually anticipate a return on their investment.
The three main programs that offer funding to cover hard and soft costs in addition to the all-inclusive sources described above include the (1) Federal Home Loan Bank’s Affordable Housing Program (AHP), (2) Low Income Housing Tax Credit Program (LIHTC), and (3) California Housing Finance Agency’s Special Needs Financing Program. Another viable source includes funding available through Redevelopment Agencies. According to California Redevelopment Law, redevelopment agencies must set aside a minimum of 20% of funds for affordable housing activities (California Redevelopment Association, 2006). Humboldt County is in the process of establishing a Redevelopment Agency. If a Redevelopment Agencies is established, the agency will provide a valuable source of development funding for affordable housing.

Operating support covers costs associated with operating and/or maintaining housing. These costs include property management, utilities, maintenance, insurance, security, debt service, and reserve funding for operating and replacements (Hecht, 1996). In market rate housing the income stream from tenant rents typically covers operating costs and provides revenue. In supportive housing, however, the target population usually falls within the HUD defined extremely-low income category or those earning 30% or less of the area median income. In most instances, the persons needing supportive housing only receive Social Security Income, if any (Bristol & Greiff, 2004). Because the target population’s incomes typically fall at the 30% of Area Median Income level or below, a rental subsidy to cover the gap between what the tenant could afford to pay and the cost of operating the housing (rent) is integral to the project’s financial sustainability (Bristol & Greiff, 2004).
Subsidies typically take the form of (1) a rental or operating subsidy and (2) capitalization of a reserve upfront that will cover the gap in operating income (Bristol & Greiff, 2004). Project-based subsidy is allocated to housing units and remains with the units. The subsidy remains in place with the units while a tenant-based subsidy is allocated to an individual or family. The subsidy, in effect, moves with the tenant. Sponsor-based subsidy is allocated to the housing sponsor. In this type of subsidy, the sponsor is given more flexibility in determining where to use the subsidy (Bristol & Greiff, 2004). The major funding programs for operating sources include Section 8 housing programs and the Shelter + Care program, which is part of the Continuum of Care funding administered by HUD. Section 8 funding is administered by the local Housing Authority and currently has limited funding under the current presidential administration. The Section 8 Moderate Rehabilitation Single Room Occupancy (SRO) Program, however, is accessed via the Continuum of Care funding and provides assistance over a ten-year term to cover operating expenses associated with rehabilitation SRO projects. The Shelter + Care program offers tenant or sponsor based rental assistance and can also cover administrative costs associated with delivery of housing assistance.

Funding for development and operating costs typically come from programs administered by HUD. HUD also administers programs that cover supportive services costs; however, tapping into funding available for health and social services can provide a significant portion of the supportive services funding. It is important to select a service partner somewhat familiar with the various programs available for health and social
Supportive services funding covers costs associated with providing services that support or assist individuals in maintaining housing and the maximum possible level of independence, stability and participation in the community. Depending on the needs of the tenants, typical services linked to supportive housing include case management, tenant engagement, mental health and substance abuse counseling, health care, life skills, vocational training and other services that assist tenants in achieving housing stability (Hannigan & Wagner, 2003). Funding for supportive services generally pay for a portion of the comprehensive services or for services delivered to a specific service-defined target population.

The four programs specifically designed to cover costs associated with supportive services include the (1) Health and Human Services Block Grant, (2) the US Department of Health and Human Services’ Health Care for the Homeless program, (3) Medi-cal, and (4) Projects for Assistance in Transition from Homeless (PATH) program. The block grants administered by the County include a range of programs including mental health programs and substance abuse prevention and treatment. Funding for supportive services could be accessed through partnerships with local agencies that administer existing programs. Such partnerships offer valuable opportunities to leverage funding and to incorporate an established program with experienced staff. The Health Care for the Homeless program could be accessed if the service provider is a certified community health center. Similarly, Medi-cal could provide valuable service funding if the service provider currently receives Medi-cal reimbursements. Finally, eligible expenses under the PATH program include outreach, screening and diagnostic services and rehab services.
As the above results suggest, there are multiple funding opportunities available to cover costs associated with the development, operation of housing and provision of services to adequately fund a supportive housing project. The financial package would include a complex structure of private loans, public subsidies, partnership commitments and other matched sources with attributed value. With the availability of funding determined the next step in the process was to identify suitable sites for a supportive housing project. One of the sites identified was then incorporated in a financial feasibility analysis on a prototype project. The results of the site identification process are discussed below.

Identification and Evaluation of Potential Development Sites Results

A series of reports prepared in conjunction with the Humboldt County General Plan update process provide valuable information on the inventory of vacant land throughout the county. According to the Building Communities report by Dyett & Bhatia (2002), there are 14,599 acres of vacant residential land in the unincorporated portions of the Community Planning Areas outside of the Coastal Zone. Of the 14,599 acres, 1,245 acres are designated as single family and multi-family residential. According to the amended version of the Technical Background Study for the 2003 Housing Element (2004), there are 506 properties consisting of 254.74 acres of vacant land with public services available and zoned to allow multiple family residential developments. Results of a Humboldt County Housing Inventory database query indicated 83 parcels consisting of 136.36 acres of land located in the Eureka and McKinleyville Community Planning Areas and designated as medium density residential under the Humboldt County General
Plan. Seven to ten dwelling units per acre are allowable under this designation. No parcels were identified in the Arcata Community Planning Area.

The GIS parcel data analysis resulted in 108 parcels comprising 47 acres of improved and vacant parcels. Of the 108 parcels, 16 had no improvement value and were therefore considered vacant. The accuracy of this assumption, however, would have to be verified at the site. Eight of the 16 vacant parcels met the development parameters. After conducting further research at the County Planning Division and at each site, six parcels were eliminated due to existing development proposals, newly constructed developments and unsuitable development conditions. The remaining two parcels consisted of adjacent parcels that would require a lot merger to meet the development parameters. Therefore, the results of the first data analysis identified one suitable site for a supportive housing development project.

The Interactive Housing Inventory Mapping System (IHIMS) parcel data analysis identified 502 parcels totaling 528 acres. Out of the 502 parcels located in all areas of the county, 20 parcels matched the size and location criteria. By comparing the IHIMS data to the GIS data, 9 duplicate parcels were rejected. The remaining 11 parcels were identified as potential development sites. The 11 parcels totaled 36.41 acres with a maximum development potential of 308 dwelling units and a minimum of 196 dwelling units. After conducting site visits to verify data accuracy and gather additional information on each site such as topography and surrounding land uses, three parcels were rejected due to existing buildings and un-developable site conditions. In the end, eight parcels consisting of seven sites (due to contiguous parcels) were identified. A
Google Earth map of each site with a summary of key site characteristics and photos taken at each site was provided in the technical report. A ranking of the sites based on information gathered at each location and public records served as a means to prioritize the sites based on site preparation needs and proximity to services frequented by the target population. The ranking process identified a 1.34 acre vacant site zoned R-4 in the Eureka Community Planning Area (CPA) as having the lowest cost potential and highest correspondence to the development parameters. This site was then incorporated into the financial feasibility analysis.

Existing motel properties provide valuable opportunities to site supportive housing for two overarching reasons. First, the existing design and functionality of motel buildings usually comprised of single room occupancy type units can provide a less costly and quicker means of delivering a permanent supportive housing project to the community. Second, motel use types often fall within the same zoning district that allows non-transient housing (Humboldt County, 2004). For instance, under the Humboldt County Code, hotel/motel use types are permitted with a use permit along with boarding/rooming houses in areas designated as C-1 and C-2 commercial zone districts. The county code defines boarding/rooming house use types as a “dwelling or part thereof where meals or meals and lodging are provided for compensation for three or more persons, not transient” (Humboldt County Code, 2000, sec. 314-137). Under this definition, the conversion of an existing motel to permanent supportive housing would fall under the same category. Furthermore, the Humboldt County Housing Element (2004) suggests that due to the decline in allowable salmon fishing limits, motels located
in the unincorporated areas could provide possible opportunities for single room
occupancy conversion due to lagging demand for transient accommodations.

Despite the favorable possibility of motel conversion for supportive housing, a
motel site was not identified within the geographic market area under consideration for
this analysis. A query of the GIS data provided by the Humboldt County Planning
Division identified one motel located in the McKinleyville CPA. The data indicated a
recent change of ownership and upon conducting a site visit it was determined that the
motel was converted to office space. Additional research consisted of talking with
County planning staff and a field survey of commercial areas located in the
unincorporated areas of the County did not uncover any potential motel rehabilitation
sites for conversion into supportive housing. Several motel sites, however, exist in the
incorporated areas of Eureka that could provide an appropriate opportunity for supportive
housing. The findings of the analysis on supportive housing design considerations that
were incorporated into a prototype project concept follows.

Analysis of Existing Supportive Housing Design Concept Results

Studies suggest that independent living has beneficial effects on individuals
experiencing mental illness (Harkness, Newman & Salkever, 2004). In an examination of
relationships between housing characteristics and dimensions of community adaptation
for people who have suffered severe and long-term mental health issues, Nelson et al.
(1998) build upon existing research which suggests that housing situations that are
smaller in size with less staffing allow residents to actively participate in daily tasks such
as cooking and cleaning. Such an environment enables individuals with mental health
issues to have higher levels of independent functioning (Nelson et al., 1998). Research also indicates that decreased independent functioning is commonly found in institutionalized living facilities with more residents and staff people (Nelson et al., 1998).

Harkness et al. (2004) provide some guidance on how to allocate resources for housing structure and neighborhood setting based on an empirical analysis of mental health service costs and residential instability. The study collected data on 670 individuals living in housing developed to provide independent living situations for persons with chronic mental illness. Building upon earlier results of Earls and Nelson (1988), the research confirms that the quality of housing impacts mental health services costs. For instance, mental health costs were found to be lower in situations where mentally ill individuals lived in buildings with little sign of deterioration, more amenities and located within newer neighborhoods (Earls & Nelson, 1988).

Studies on the effect of tenant mix reveals the outcomes depend on the individual experiencing mental illness (Harkness et al., 2004). If the tenant mix is comprised predominantly of persons experiencing similar mental health issues, an individual may find more comfort and security in the living situation therefore impacting mental health outcomes more positively (Newman et al., 2001). Alternatively, housing situations where the tenant mix is not comprised mainly of persons experiencing mental illness may be more conducive to improved mental health outcomes for individuals who thrive in situations where the individual’s illness remains private (Hodgins, Cyr & Gaston, 1990;
Nagy et al., 1988). Therefore, the research is inconclusive on an ideal tenant mix of housing for persons experiencing mental illness.

The Service Enriched Housing Design Manual (SEHDM) provides adaptable prototypes of SRO and housing models where the delivery of services is part of the normal operation of the housing (Gran Sultan Associates, 1993). The manual is the culmination of research gathered on existing SROs and synthesized with input gathered through surveys and interviews with existing supportive housing residents. According to the SEDHM (1994), successful supportive housing building programs balance the housing needs of the residents with the social service program.

Over the course of developing the building program, the number and size of units, common areas and staff offices are weighed against site characteristics and overall cost. The key results presented in the SEDHM (1994) include: (1) the design and flow of the housing should foster the development of social networks among residents; (2) smaller buildings have a more residential ambiance, thereby fostering a better sense of community among the residents; (3) safety and privacy are top priorities for residents; and (4) social service offices should be located in an area easily accessible by residents, but out of the most frequented areas to maintain a sense of hospitable privacy. As suggested in the SEDHM (1994), these design considerations complement the intended outcomes of the supportive housing program.

In addition to incorporating the social aspect of those who will occupy and use the building, environmental and green building design considerations are essential components to new development projects. By law, residential and nonresidential
buildings are required to meet certain standards of energy efficiency in California as defined under Title 24, Part 6 of the California Code. Beyond meeting the required standards, the green building process of integrating social and environmental goals better serves the occupants, society at large and the environment (Wilson et al., 1998).

In recent years, private and public programs are beginning to offer more incentives for green affordable housing projects. Grant funding programs, tax credits and energy rebates provide incentives for developers to integrate energy saving techniques and other green building processes (Karlenzig, 1999). Regardless of such incentives, design considerations such as natural day lighting and cooling, low emmisivity windows, materials from renewable resources such as natural linoleum, Energy Star appliances, minimal impervious surfaces, water efficient landscaping among others offer low-cost green building opportunities for developers to integrate into affordable housing projects without compromising financial feasibility objectives (Wells & Lofman, 2003).

Based on the results above, a prototype project concept was developed to maximize the development potential while minimizing environmental impacts of the 1.34-acre site identified in the data analysis. As summarized in Appendix A, the two-story prototype project will house 15 chronically homeless individuals diagnosed with serious mental illness. The balance of the housing will include 20 compact one-bedroom units of approximately 450 square feet that will house individuals and two-person households with incomes of 80% or less than the Area Median Income. The tenants living in the 15 units will have access to coordinated supportive services that will support
the individuals to remain housed. A case manager will be available on site to engage with the individuals and provide appropriate support as necessary.

The fully furnished units will contain a small kitchenette/dining area that opens into a bedroom area. The units will also include a private bathroom and shower. Built-in compartments and a storage closet will provide ample storage space for personal belongings. The kitchenette will include Energy Star appliances and all areas will be designed to comply with Universal Design standards, which seek to accommodate the widest range of potential users, including people with mobility and visual impairments (Knecht, 2004). Green building design considerations will be incorporated throughout the design, construction and operation of the project.

The building will be configured to include a greeting area and common rooms that serve various functions such as for group and individual activities. These rooms will provide spaces other than the residents' private space to socialize and participate in group activities. A small common area kitchenette will also be available to residents. A resident manager will maintain the grounds and will ensure residents have a safe and clean environment to live in. A team-oriented approach to property management and case management will encourage tenant participation in services while maintaining the rights of tenants at all times. The next section discusses the results of the financial feasibility analysis.

Results of the Financial Feasibility Analysis

The financial feasibility analysis consisted of analyzing the financial situation of developing the prototype supportive housing project on the site identified as having the
lowest development cost potential. As shown in the Development Budget (Appendix B),
total development costs were estimated at $4,849,809 or $138,566 per unit. Effective
gross income derived from the Operating Budget (Appendix C) and indicated on the
Sources & Uses Budget (Appendix D) was projected at $183,382 assuming a vacancy
loss of 5% while effective gross expenses were projected at $113,536 for a total net
operating income (NOI) of $69,847. After subtracting debt service payments, a net cash
flow of $6,465 is indicated (Appendix D). The net cash flow and any subsequent cash
flow would be paid into a residual receipts account for future use in situations when there
is shortfall of operating income or capital expenditure needs.

The results of the financial feasibility analysis based on a hypothetical
development scenario where an identified vacant parcel is developed into a prototype
supportive housing project indicates that financially, there is high probability that such a
project could be developed in Humboldt County successfully. Moreover, the analysis
indicates that funding sources could be reasonably secured and that operating expense
and debt service payments could reasonably be provided by income from the property in
the form of tenant rents and public subsidies. The potential to secure funding for services
rests on developing a partnership with an experienced social service agency familiar with
the various supportive services funding sources.

Because the financial analysis is based on current cost projections, the analysis
could be invalidated by sharp increases in construction materials or interest rates over the
next year. The high probability that a supportive housing project will be prolonged due to
public opposition is not factored into this analysis. It would be useful to include a line
item in the development budget providing a cushion of funding sources that could be used to cover costs related to a prolonged public approval process. Funding sources, however, do not permit such use of funds.

It is also important to note that the analysis falls short of indicating the financial feasibility of a supportive housing project for a period of more than five years. The available funding sources for operating support and service funding typically cover a five-to-ten-year period. The outlook for securing sources of funding beyond the initial funding program periods, however, is unclear. Some communities have established housing trust funds as a means to provide dedicated sources of continuous funding to affordable housing projects. If this type of fund is established in Humboldt County, the potential to secure funding over the long-term will be more likely. Despite these limitations, supportive housing projects have been operating throughout the nation for decades. Long-term success will ultimately depend on the commitment made by the project participants and their ability to gain community support for the project over the long-term.

Financial Feasibility Analysis Conclusions

The financial feasibility analysis consisted of examining potential funding sources, identifying and evaluating potential development sites, analysis of building design considerations to incorporate into a prototype project concept and then conducting an analysis on the financial feasibility of developing the prototype project on the site identified as having the lowest development cost potential. Taking into consideration the market study results that indicate a need for supportive housing for mentally ill homeless
individuals, the results of the financial feasibility analysis indicate that it is likely that existing funding sources can be reasonably secured to cover the costs associated with the development and ongoing operation of supportive housing in Humboldt County. The next chapter ties the process of conducting the project and the project’s results into the theoretical framework developed in the review of literature.
DISCUSSION

This section relates the project results back to the theoretical framework. In essence, the following discussion highlights the significance of the project within the nonprofit housing sector and for the greater community in relation to the theoretical concepts presented in the first chapter. First, a relationship between the project and the framework built on the broader context of the nonprofit sector is shown. Then a parallel is drawn between the results of the project and the theory presented on the supportive housing model of affordable housing.

As Goetz (1992) and Schwartz et al. (1996) indicate, the nonprofit housing sector is central to the delivery of housing that is affordable to people with limited incomes. The nonprofit housing development organization that sponsored this project exemplifies this concept. The organization currently plays an instrumental role in creating and preserving affordable housing opportunities for limited income people residing in Humboldt County. One of the main ingredients that enabled the formation and continued operation of the organization includes funding and technical support from what Keyes et al. (1996) regard as the “institutional support network.” For example, to develop a supportive housing project, the organization will have to rely on a myriad of funding and technical support from public agencies, private lending institutions and philanthropic organizations.

The relationship between the nonprofit housing development organization and the local public sector in Humboldt County will be instrumental in gaining support for the project. Goetz's models of arrangements between the public and nonprofit sectors
illuminate the concept that stronger relationships between the two are associated with more influence on local housing policy and more forms of support for the delivery of affordable housing by the nonprofit sector. It will be integral for the nonprofit housing development organization to educate and work with the public sector throughout the development process. Historically, the relationship between the nonprofit housing development organization and the public sector in Humboldt County resembles the partnership model as posited by Goetz (1992). Therefore, the outcome of a supportive housing project will depend on the strength of the partnership maintained by public agencies and the private nonprofit housing and social services agencies.

This project was conducted as part of one of the main stages of affordable housing development. As Barrett and Blair (1982) suggest, the market study and financial feasibility studies will provide valuable information to the staff of the nonprofit organization and to the Board of Directors to decide if the supportive housing project makes sense or not from a financial and organizational capacity standpoint. Because the predevelopment phase is dynamic according to Reynolds (2001), however, the project will only supplement a series of studies and reports. Other research will shed light on the legal aspects of taking on a supportive housing project such as the liability assumed under various ownership structures, in addition to possible land-use constraints such as environmental issues. Therefore, this project is part of an extensive process of uncovering indicators on the possibility of developing supportive housing in Humboldt County.

The delivery of a supportive housing project in Humboldt County will require the nonprofit housing development organization to overcome the constraints indicated in the
work of Walker (1993), Schwartz et al. (1996), Dear (1992) and Lee (2004). For instance, because development fees are an integral source of income for the nonprofit housing sector as suggested by Walker (1993), it will be important for the nonprofit to avoid undercapitalizing a supportive housing project. Although waiving development fees offers a possible solution to reduce overall development costs, the impact on the organization's operational capacity over the long term could negatively impact a supportive housing project if the organization lacks financial capacity to continue operating. For instance, if the nonprofit housing development organization assumes the building ownership and property management responsibilities, the organization must maintain a healthy financial base that is supported by rental income and development fees.

Walker (1993) also suggests that the difficulty of measuring development effects constrains the ability of the nonprofit housing sector to deliver affordable housing due to claims of community benefits with uncertain evidence. The potential for the public to reject or disbelieve the community benefits associated with supportive housing could be ameliorated, however, through community outreach that provides quantitative and qualitative information on expected impacts of supportive housing. This outreach could also serve to mitigate impacts associated with NIMBYism of which Harkness et al. (2004) have found to increase developments costs and even prevent the project from moving forward. A community outreach strategy that incorporates the research of Susskind and Cruikshank (1987) that recommends building integrative agreements will be critical to gaining public support and ultimately approval for the project. By holding
educational programs about supportive housing and forming community advisory boards that address the differences of all stakeholders will increase the likelihood of gaining support for the project as Dear (1992) suggests.

A supportive housing project will also likely encounter difficulty in maintaining the ongoing property and asset management responsibilities. Schwartz et al. (1996), for instance, suggest that the property management arm of affordable housing is already challenged by the complexities related to compliance reporting and limited ability to attract and retain employees. The property management function of supportive housing, however, is even more complex in that the property management activities and goals are coordinated with the supportive services function, which requires management to approach issues from an unfamiliar angle. As Schwartz et al. (1996) suggest the nonprofit housing development organization would be better prepared to deal with management challenges if resources were channeled to support the property and asset management functions. With this understanding, a supportive housing project could be better served by focusing resources on optimizing the current property management operation in anticipation of taking on a challenging project such as supportive housing.

Lee's (2004) perspective as a participant in the nonprofit housing sector on constraints encountered in the delivery of affordable housing provides a useful observation on issues that could potentially lead to the demise of a supportive housing project. These issues include the high cost of land acquisition, construction, insurance premiums, permitting fees and other governmental requirements. Humboldt County, like the rest of California, is experiencing similar issues. For instance, a report produced by
Humboldt County on the housing needs, availability and affordability in Humboldt County indicates a marked increase in per unit housing costs attributed to high infrastructure development costs. At the same time, access to grant funding is increasingly more competitive as Lee (2004) suggests. Therefore, partnerships and collaborative efforts across industries such as those formed through the Continuum of Care planning process for homeless assistance grants administered by the federal government will be integral to the strategies communities develop to target specific housing needs and to allocate resources appropriately.

The above discussion attempts to highlight the relationship between the project and the framework built on the broader context of the nonprofit housing sector. The second part of the theoretical discussion presented in chapter one provides context for the subject of the project through an analysis of the origins, elements, outcomes and challenges of permanent supportive housing. The following section draws a parallel between the results of the market study and financial feasibility analysis and the theory presented on the supportive housing model of affordable housing.

The market study consisted of an examination of secondary data analysis on indicators of demand and supply of existing programs aimed at supporting mentally ill homeless individuals in creating and maintaining a home in the community. The results of the study indicated a gap between existing housing programs and the demand for housing linked to services. This is significant because research suggests that people with disabilities have among the highest poverty rates and are more prone to becoming homeless (Batavia & Beaulaurier, 2001). By showing the need for supportive housing,
the acute problem associated with poverty and homelessness of individuals who are
disabled due to mental illness is addressed.

Building upon the results of the market study, the financial feasibility analysis
looked at whether available funding could be reasonably secured to cover the costs
associated with acquiring and developing the prototype supportive housing project and if
projected income from the project could cover the ongoing costs of operating the project.
The results of the financial feasibility analysis indicate that it is likely that existing
funding sources can be reasonably secured to cover the costs associated with the
development and ongoing operation of supportive housing in Humboldt County. By
examining the potential funding sources, identifying possible sites, analyzing design
consideration for a prototype project concept and then looking at projected financial
statements on developing the prototype project, it was found that a similar project could
be developed.

The results, however, are useless without knowing the significance of a
supportive housing project. Ultimately, the results indicate that it is likely that the bricks
and mortar component of a supportive housing project, which Reynolds (2001)
distinguishes as the result of three very different disciplines, could be developed and
operated over the long term. As Shegos (2001) indicates, supportive housing projects are
typically undertaken by the nonprofit housing sector. The unique part of a supportive
housing project is the collaboration between the nonprofit housing sector and the social
services sector to provide independent living arrangements for people who encounter the
most difficulty in obtaining and maintaining housing.
According to the Corporation for Supportive Housing (2003), successful coordination of property management and supportive service functions of the project relies on communicating clearly delineated policies and procedures that serve to balance the functions that traditionally operate independently. Successful coordination of the functions will lead to more successful outcomes of the project. According to the research, the outcomes of supportive housing encompass consumer preferences for independent living, housing outcomes, and impacts on associated costs (e.g.: Culhane et al., 2002; Gulcur et al., 2003; Rog, 2004; Tanzman, 1990; Tsemberis et al., 2004, Yeich, 1993). Harkness et al. (2004) indicate that the challenges of supportive housing are associated with a higher potential to encounter community opposition, higher financing costs, higher turnover and vacancy rates, and additional maintenance costs. Additionally, Reynolds (2001) indicates that managing an operating budget for not only the housing operation, but the supportive services operation as well presents a major challenge to supportive housing projects.

The results of the market study and financial feasibility analysis do not indicate the potential for fulfilling the roles of the nonprofit housing and social services sectors, the associated outcomes of supportive housing or the associated challenges. The positive financial feasibility results, however, implicate that resources are available to foster successful partnerships, positive outcomes for the individuals housed and the community as a whole and to overcome challenges. Ultimately, this project indicates a need and financial feasibility of a model of affordable housing that will fill a community need and provide benefits to the individuals housed and the community as a whole. The nonprofit
housing sector's role in delivering affordable housing will be instrumental in creating supportive housing.
CONCLUSION

The project consists of a market study and financial feasibility analysis on an affordable housing model known as permanent supportive housing. To provide a theoretical framework for the project, a review of literature provides a broader context for the project as a task undertaken in the delivery of affordable housing by the nonprofit housing sector. The framework also provides context to the subject of the project, which is affordable housing linked to services aimed at supporting mentally ill homeless individuals in creating and maintaining a home in the community.

The project was conducted as part of an internship with a nonprofit housing development organization. The results of the market study and financial feasibility analysis indicate that the demand for supportive housing outweighs the supply of existing programs aimed at supporting mentally ill homeless individuals in creating and maintaining a stable home in Humboldt County, California. The results also indicate that it is likely that existing funding sources can be reasonably secured to cover the costs associated with the development and ongoing operation of supportive housing in the County.
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### Prototype Building Program: 35 units

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<td><strong>Total Net SF</strong></td>
<td></td>
<td></td>
<td>16,975</td>
</tr>
<tr>
<td><strong>Total Gross SF</strong></td>
<td></td>
<td></td>
<td>18,673</td>
</tr>
<tr>
<td>Parking Spaces (1.5:Unit)</td>
<td></td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>SF Needed</td>
<td></td>
<td></td>
<td>12,150</td>
</tr>
<tr>
<td><strong>Total Building Footprint</strong></td>
<td></td>
<td></td>
<td>30,823</td>
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</table>
## DEVELOPMENT BUDGET

### Site Specific Analysis

<table>
<thead>
<tr>
<th>Site</th>
<th>A</th>
</tr>
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<tbody>
<tr>
<td>Gross Land Area (Ac)</td>
<td>1.34</td>
</tr>
<tr>
<td>Net Land Area (Ac)</td>
<td>1.34</td>
</tr>
<tr>
<td># Units</td>
<td>35</td>
</tr>
<tr>
<td>Gross Building SF</td>
<td>18,673</td>
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### CONSTRUCTION COSTS

#### ACQUISITION COSTS

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Land Cost</td>
<td>$379,408</td>
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<tr>
<td>Existing Structures</td>
<td>-</td>
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<tr>
<td><strong>TOTAL ACQUISITION COST</strong></td>
<td><strong>$379,408</strong></td>
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#### CONSTRUCTION

<table>
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<tr>
<td>Site Work</td>
<td>$97,000</td>
</tr>
<tr>
<td>New Construction</td>
<td>$2,800,875</td>
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<tr>
<td>Rehabilitation Work</td>
<td>-</td>
</tr>
<tr>
<td>General Requirements</td>
<td>$140,044</td>
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<tr>
<td>Overhead/Profit</td>
<td>$347,745</td>
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<tr>
<td><strong>TOTAL CONSTRUCTION COSTS</strong></td>
<td><strong>$3,385,664</strong></td>
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</table>

#### TOTAL ARCHITECT/ENGINEER FEES

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td><strong>TOTAL ARCHITECT/ENGINEER FEES</strong></td>
<td><strong>$318,766</strong></td>
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#### CONST. INTEREST & FEES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>Const. Period Interest</td>
<td>$44,602</td>
</tr>
<tr>
<td>Origination Fee</td>
<td>$12,594</td>
</tr>
<tr>
<td>Title and Recording</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>TOTAL CONST. INT. &amp; FEES</strong></td>
<td><strong>$58,196</strong></td>
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#### PERMANENT FINANCING

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Loan Origination Fee</td>
<td>$500</td>
</tr>
<tr>
<td>Credit Enhance &amp; Appl. Fee</td>
<td>-</td>
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<tr>
<td>Insurance/Title &amp; Recording</td>
<td>$1,200</td>
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<tr>
<td><strong>TOTAL PERM. FINANCING COSTS</strong></td>
<td><strong>$1,700</strong></td>
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### Assumptions

#### Construction

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<tbody>
<tr>
<td>Land $/SF</td>
<td>$6.50</td>
</tr>
<tr>
<td>Construction Cost/SF</td>
<td>$150</td>
</tr>
<tr>
<td>Contingency</td>
<td>5%</td>
</tr>
<tr>
<td>Architect</td>
<td>5%</td>
</tr>
<tr>
<td>Engineering/Environmentals</td>
<td>6%</td>
</tr>
<tr>
<td>Contr P&amp;OH</td>
<td>12.00%</td>
</tr>
<tr>
<td>Gen Requirements</td>
<td>5.00%</td>
</tr>
<tr>
<td>Contingency</td>
<td>5.00%</td>
</tr>
<tr>
<td>Dev Fee</td>
<td>10.00%</td>
</tr>
<tr>
<td>Const Period</td>
<td>10</td>
</tr>
<tr>
<td>Const loan fee</td>
<td>1.00%</td>
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<tr>
<td>Const Int.</td>
<td>8.50%</td>
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<tr>
<td>Impact Fee (Est)</td>
<td>3%</td>
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<tr>
<td>Processing Fee/Unit (Est)</td>
<td>$500</td>
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#### Permanent Loan

<table>
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<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Points</td>
<td>1.00%</td>
</tr>
<tr>
<td>Fees</td>
<td>$0.00</td>
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<tr>
<td>PITI Ratio</td>
<td></td>
</tr>
<tr>
<td>Total Debt Ratio</td>
<td></td>
</tr>
<tr>
<td>Amort Term</td>
<td>30</td>
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#### Other

<table>
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<tr>
<th>Description</th>
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<tbody>
<tr>
<td>T&amp;E</td>
<td>1.75%</td>
</tr>
<tr>
<td>$/Unit Furnishings</td>
<td>$3,500</td>
</tr>
<tr>
<td>CA Furniture/Program Equipment</td>
<td>$7,500</td>
</tr>
<tr>
<td>Attorney $/hr</td>
<td>$250</td>
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<tr>
<td>Attorney Hours</td>
<td>30</td>
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<tr>
<td>Rent Reserves</td>
<td>15%</td>
</tr>
<tr>
<td>Operating Reserves</td>
<td>10%</td>
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#### Construction Loan

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Private Loan Amount</td>
<td>$1,259,352</td>
</tr>
<tr>
<td>Interest Calculation</td>
<td>$44,602</td>
</tr>
<tr>
<td>Category</td>
<td>Amount</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>TOTAL LEGAL FEES</td>
<td>$7,500</td>
</tr>
<tr>
<td>RESERVES</td>
<td></td>
</tr>
<tr>
<td>Rent Reserves (15%)</td>
<td>$27,929</td>
</tr>
<tr>
<td>Operating Reserves (10%)</td>
<td>$9,335</td>
</tr>
<tr>
<td>TOTAL RESERVE COSTS</td>
<td>$37,264</td>
</tr>
<tr>
<td>TOTAL APPRAISAL COSTS</td>
<td>$2,500</td>
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<tr>
<td>CONTINGENCY</td>
<td></td>
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<tr>
<td>Hard Contingency</td>
<td>$169,283</td>
</tr>
<tr>
<td>Soft Contingency</td>
<td>$21,336</td>
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<tr>
<td>TOTAL CONTINGENCY COSTS</td>
<td>$190,619</td>
</tr>
<tr>
<td>OTHER</td>
<td></td>
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<tr>
<td>Environmental Audit</td>
<td>$1,512</td>
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<tr>
<td>Local Developer Impact Fees</td>
<td>$86,936</td>
</tr>
<tr>
<td>Permit processing Fees</td>
<td>$17,500</td>
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<tr>
<td>Marketing</td>
<td>$2,000</td>
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<tr>
<td>Relocation Expenses</td>
<td>$-</td>
</tr>
<tr>
<td>Furniture</td>
<td>$130,000</td>
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<td>TOTAL OTHER COSTS</td>
<td>$237,948</td>
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<tr>
<td>SUBTOTALS</td>
<td>$4,428,945</td>
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<tr>
<td>DEVELOPER COSTS</td>
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<tr>
<td>Developer Fee</td>
<td>$419,369</td>
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<tr>
<td>Consultant/Processing Agent</td>
<td>$-</td>
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<tr>
<td>Project Administration</td>
<td>$-</td>
</tr>
<tr>
<td>Const. Management Oversight</td>
<td>$-</td>
</tr>
<tr>
<td>Other (specify) Market Study</td>
<td>$1,500</td>
</tr>
<tr>
<td>TOTAL DEVELOPER COSTS</td>
<td>$420,869</td>
</tr>
<tr>
<td>TOTAL PROJECT COSTS</td>
<td>$4,849,814</td>
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</table>
**APPENDIX C**

**OPERATING BUDGET**

<table>
<thead>
<tr>
<th>Assumptions</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
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<tr>
<td>Units</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vacancy</td>
<td>5.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry</td>
<td>$100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>6.20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers Comp Insurance</td>
<td>8.50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replacement Reserve</td>
<td>0.60%</td>
<td></td>
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**Rent Roll Table**

<table>
<thead>
<tr>
<th>Unit Type</th>
<th># Units</th>
<th>HOME Rent</th>
<th>Utility Allowance</th>
<th>Adjusted Rent</th>
<th>Tenant Portion</th>
<th>S + C Subsidy</th>
<th>Annual Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>efficiency (S+C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Bed</td>
<td>12</td>
<td>$445</td>
<td>$25</td>
<td>$420</td>
<td>$-</td>
<td>$420</td>
<td>$15,120</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>$476</td>
<td>$25</td>
<td>$420</td>
<td>$-</td>
<td>$153</td>
<td>$60,480</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>$533</td>
<td>$25</td>
<td>$420</td>
<td>$-</td>
<td>$153</td>
<td>$47,520</td>
</tr>
<tr>
<td><strong>subtotals</strong></td>
<td><strong>35</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>186,192</strong></td>
</tr>
<tr>
<td>1-Bed mgr unit</td>
<td>1</td>
<td>$250</td>
<td>$-</td>
<td>$175</td>
<td>$-</td>
<td>$175</td>
<td>$3,000</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>36</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>189,192</strong></td>
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</table>

**INCOME**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Rents (Tenant Portion)</td>
<td>$38,448</td>
<td>$39,409</td>
<td>$40,394</td>
<td>$41,404</td>
<td>$42,439</td>
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<tr>
<td>S + C Subsidy</td>
<td>$37,152</td>
<td>$38,081</td>
<td>$39,033</td>
<td>$40,009</td>
<td>$41,009</td>
</tr>
<tr>
<td>HOME Assisted Units - Gross Rent</td>
<td>$110,592</td>
<td>$113,357</td>
<td>$116,191</td>
<td>$119,095</td>
<td>$122,073</td>
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<tr>
<td>Residential Vacancies</td>
<td>$9,310</td>
<td>$9,542</td>
<td>$9,781</td>
<td>$10,025</td>
<td>$10,276</td>
</tr>
<tr>
<td>Resident Manager</td>
<td>$2,500</td>
<td>$2,075</td>
<td>$2,152</td>
<td>$2,313</td>
<td>$3,111</td>
</tr>
<tr>
<td>Gross Rent - Commercial Space</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>Commercial Vacancies</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>NET RENTAL INCOME</strong></td>
<td><strong>$179,882</strong></td>
<td><strong>$184,379</strong></td>
<td><strong>$188,989</strong></td>
<td><strong>$193,714</strong></td>
<td><strong>$198,557</strong></td>
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</table>

**OTHER REVENUE**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laundry</td>
<td>$3,500</td>
<td>$3,588</td>
<td>$3,677</td>
<td>$3,769</td>
<td>$3,863</td>
</tr>
<tr>
<td>Misc. Income</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td><strong>$183,382</strong></td>
<td><strong>$187,967</strong></td>
<td><strong>$192,666</strong></td>
<td><strong>$197,483</strong></td>
<td><strong>$202,420</strong></td>
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**OPERATING EXPENSES**

<table>
<thead>
<tr>
<th>Expense</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Office Staff (30 hrs/wk at $10/hr)</td>
<td>$(15,600)</td>
<td>$(16,146)</td>
<td>$(16,711)</td>
<td>$(17,296)</td>
<td>$(17,901)</td>
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<tr>
<td>Resident Manager (30 hrs/wk at $9/hr)</td>
<td>$(14,040)</td>
<td>$(14,531)</td>
<td>$(15,040)</td>
<td>$(15,566)</td>
<td>$(16,111)</td>
</tr>
<tr>
<td>Maintenance Payroll</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>Security Payroll</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>Payroll Taxes</td>
<td>$(1,838)</td>
<td>$(1,902)</td>
<td>$(1,969)</td>
<td>$(2,037)</td>
<td>$(2,109)</td>
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<tr>
<td>Workers Comp Insurance</td>
<td>$(2,519)</td>
<td>$(2,608)</td>
<td>$(2,699)</td>
<td>$(2,793)</td>
<td>$(2,891)</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>TOTAL SALARY RELATED EXPENSES</strong></td>
<td><strong>$(33,997)</strong></td>
<td><strong>$(35,187)</strong></td>
<td><strong>$(36,419)</strong></td>
<td><strong>$(37,693)</strong></td>
<td><strong>$(39,012)</strong></td>
</tr>
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</table>
### GENERAL EXPENSES

<table>
<thead>
<tr>
<th>Service</th>
<th>(500)</th>
<th>(518)</th>
<th>(536)</th>
<th>(554)</th>
<th>(574)</th>
<th>(593)</th>
<th>(612)</th>
<th>(631)</th>
<th>(650)</th>
<th>(669)</th>
<th>(688)</th>
</tr>
</thead>
</table>

1. Property management fee based on 6% of Net Rental Income.

### TOTAL OPERATING & MAINTENANCE

### UTILITIES

<table>
<thead>
<tr>
<th>Service</th>
<th>(2,300)</th>
<th>(2,381)</th>
<th>(2,464)</th>
<th>(2,550)</th>
<th>(2,639)</th>
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</thead>
</table>

### TAXES & INSURANCE

<table>
<thead>
<tr>
<th>Service</th>
<th>(5,500)</th>
<th>(5,693)</th>
<th>(5,892)</th>
<th>(6,098)</th>
<th>(6,311)</th>
</tr>
</thead>
</table>

### TOTAL EXPENSES

<table>
<thead>
<tr>
<th>Service</th>
<th>(93,348)</th>
<th>(96,507)</th>
<th>(99,774)</th>
<th>(103,153)</th>
<th>(106,647)</th>
</tr>
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</table>

### NET OPERATING INCOME (NOI)

<table>
<thead>
<tr>
<th>Service</th>
<th>90,034</th>
<th>91,460</th>
<th>92,892</th>
<th>94,330</th>
<th>95,773</th>
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### FINANCIAL EXPENDITURES - OTHER

<table>
<thead>
<tr>
<th>Service</th>
<th>(63,713.77)</th>
<th>(63,713.77)</th>
<th>(63,713.77)</th>
<th>(63,713.77)</th>
<th>(63,713.77)</th>
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### TOTAL FINANCIAL EXPENSES

<table>
<thead>
<tr>
<th>Service</th>
<th>(83,901)</th>
<th>(83,996)</th>
<th>(84,094)</th>
<th>(84,196)</th>
<th>(84,300)</th>
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</table>

### Debt Service Coverage Ratio

<table>
<thead>
<tr>
<th>Service</th>
<th>6,133</th>
<th>7,463</th>
<th>8,797</th>
<th>10,134</th>
<th>11,472</th>
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</thead>
</table>

### Notes

1. Property management fee based on 6% of Net Rental Income.
2. Replacement Reserve of 0.6% is based on 2005 HOME Program NOA.
3. Any operating income shall be disbursed according to HOME Program Regulations.
4. "Debt Service Coverage Ratio" means the ratio of (1) Operating Income less the sum of Operating Expenses and required reserves to (2) debt service payments, excluding voluntary prepayments and non-mandatory debt service. CalHFA requires minimum debt se
### SOURCES & USES BUDGET

#### SOURCES DURING CONSTRUCTION

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>Private Loan</td>
<td>$1,259,352</td>
</tr>
<tr>
<td>CA HOME Loan</td>
<td>$3,134,958</td>
</tr>
<tr>
<td>FHLB Affordable Housing Program (AHP)</td>
<td>$335,804</td>
</tr>
<tr>
<td>SHP 1-PSH Unit</td>
<td>$119,700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$4,849,814</strong></td>
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#### PERMANENT SOURCES

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalHFA Special Needs Program (30-year at 3%)</td>
<td>$1,259,352</td>
</tr>
<tr>
<td>CA HOME Loan</td>
<td>$3,134,958</td>
</tr>
<tr>
<td>FHLB Affordable Housing Program (AHP)</td>
<td>$335,804</td>
</tr>
<tr>
<td>SHP 1-PSH Unit</td>
<td>$119,700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$4,849,814</strong></td>
</tr>
</tbody>
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#### OPERATING PROFORMA/CASHFLOW

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Rental Income</td>
<td>$152,040</td>
</tr>
<tr>
<td>Shelter + Care Project Based Rent Subsidy</td>
<td>$37,152</td>
</tr>
<tr>
<td>Less 5% Vacancy Loss</td>
<td>$(9,310)</td>
</tr>
<tr>
<td>Laundry, Damage, late fee, etc.</td>
<td>$3,500</td>
</tr>
<tr>
<td><strong>Effective Gross Income</strong></td>
<td><strong>$183,382</strong></td>
</tr>
<tr>
<td>Less Operating Expenses</td>
<td>$(93,348)</td>
</tr>
<tr>
<td>Less Operating Reserve</td>
<td>$(2,800)</td>
</tr>
<tr>
<td>Less Replacement Reserve</td>
<td>$(17,387)</td>
</tr>
<tr>
<td><strong>Effective Gross Expenses</strong></td>
<td><strong>$(113,536)</strong></td>
</tr>
<tr>
<td>NOI</td>
<td>$69,847</td>
</tr>
<tr>
<td>Less Total Debt Service</td>
<td>$(63,714)</td>
</tr>
<tr>
<td><strong>Net Cash Flow</strong></td>
<td><strong>$6,133</strong></td>
</tr>
</tbody>
</table>

#### Services Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive Housing Program (Federal SHP)</td>
<td>$37,500</td>
</tr>
<tr>
<td>Mental Health Services Act Funding (County)</td>
<td>$30,000</td>
</tr>
<tr>
<td>Leveraged Services (Local)</td>
<td>$7,500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$75,000</strong></td>
</tr>
</tbody>
</table>

**Notes**

1. Service funding is based on estimated cost to provide services to one single person household at $5,000 per year.