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Identifying Risk Factors for Homelessness Among People Living with HIV Disease

by

Lynn D. Keenan

A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Philosophy

University of Washington

1996

Approved by Cheryl A. Richey

Dr. Cheryl A. Richey, Chairperson of Supervisory Committee

Program Authorized to Offer Degree Social Welfare

Date 12/11/96

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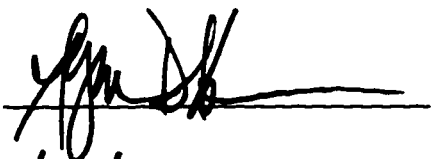
Signature 

Date 12/11/96

University of Washington

Abstract

Identifying Risk Factors for Homelessness Among People Living with HIV Disease

by

Lynn D. Keenan

Chairperson of the Advisory Committee: Professor Cheryl A. Richey
School of Social Work

As the HIV virus spreads into America's most economically vulnerable communities, the US faces a low-cost housing shortage that leaves more than 40% of all poor people unable to find affordable housing. It is estimated that up to half of all HIV+ Americans need some form of housing assistance during the duration of their illness. In the midst of this, housing planners and service providers find it necessary to identify those at greatest risk of poor housing outcomes, including homelessness, to direct the largest portion of housing resources toward their situation. The study presented here was undertaken in service to that task.

Utilizing survey data from 2,856 people with HIV disease, the study seeks to identify those respondents at greatest risk of homelessness and those characteristics that might inform the development of housing and related services for them. Logistic regression analysis identifies the available variables that significantly increase respondents' odds of homelessness. Of income, gender, race/ethnicity, age, HIV status, household composition, the presence of children, hard drug use, history of incarceration, and sexual orientation, respondents' income, hard drug use, and household composition appear to most increase respondents' odds of homelessness. Very poor respondents who use hard drugs and live alone are the most likely to be homeless.

Regression findings and respondents' previous history of homelessness are used to construct a risk-of-homelessness spectrum that classifies each

respondent at low, moderate, or high risk of homelessness. Men of color and women are over-represented in the high risk group. Thirty-seven percent of the respondents in the high risk group report using hard drugs. Women in this group are particularly likely to use: 54% use hard drugs, 26% of whom have minor children in the home. Among respondents in the high risk group who were asked if they had traded sex for a place to stay, 42% indicated they had, and 44% of respondents asked about previous incarceration indicated they had been incarcerated in the past. Implications of these findings for social work practice, policy, and research are discussed in the final chapter of the study.

Table of Contents

List of Figures....i
List of Tables....iv
Chapter 1 Introduction....1
Overview of the Dissertation....1
The Significance of this Study for the Social Work Profession....3
Chapter 2 Contributing Research....5
Introduction....5
I. Poverty Among People with HIV/AIDS....6
II. Affordable Housing Scarcity in the United States for the Most Impoverished....10
The Gap Between Affordable Housing and Incomes....11
Decline in the Number of Affordable Housing Units....16
Reasons for Supply Decline....17
The Confluence of Loss of Real Income and Loss of Low-Cost Housing Units....17
Equal Access and Housing....18
III. Relevant Research on Homelessness....19
Demographic Profile of the Homeless....19
Gender....19
Ethnicity....20
Age....20
Income....21
Family Status and Social Support Networks....21
Health, Mental Health, and Substance Abuse....23
Incarceration Rates Among the Homeless....25
Prevalence of Homelessness....25
Duration of Homelessness....27
Causes of Homelessness....30
IV. HIV/AIDS and Homelessness....31
The Ramifications of Homelessness for People with HIV Disease....32
HIV/AIDS Risk Behaviors Among Homeless People....34
Pathways to Homelessness Among People with HIV Disease....35

The State of AIDS Housing in the US Today 37
Major Public Funding Sources for AIDS Housing 38
HOPWA 39
The Ryan White CARE Act 40
The Housing Needs of People with HIV/AIDS Persist 40
Chapter 3 Methodology 42
The Sample Data Set 42
The Questionnaire 43
Sampling Approaches 44
Specific Methodologies by Community 44
Chicago 45
Alameda County 45
Contra Costa County 46
Riverside/San Bernardino Counties 46
Washington State 47
Phoenix and Surrounding Counties 47
Limitations of the Data Set 48
Regional Differences and Missing Regions 48
Dilemmas in Surveys That Include Homeless People 49
Data Analysis 50
Descriptive Analyses 50
Comparison Analysis 50
Demographic and Behavioral Description 50
Analysis of Housing Preferences 51
Multivariate Analyses 52
The Dependent Variable 53
The Independent Variables 54
Inclusion of Variables by Locale 57
Chapter 4 Research Findings 59
Introduction 59
Comparison of the Data Set to the US Epidemiological Profile of People with HIV Disease 59
Descriptive Analysis of Sample Data Set Respondents 63
Race/Ethnicity 64
Gender 65
Gender and Race/Ethnicity 65

Sexual Orientation 67
Monthly Income 68
Gender 69
Race/Ethnicity 70
Sexual Orientation 70
Percentage of sample living below the poverty level 72
HIV Status 74
Age 76
Respondents' Household Composition and Presence of Children in Home 76
Substance Use Among Respondents 77
Substance Use and Gender 79
Substance Use and Race/Ethnicity 79
Substance Use and Race/Gender 80
Drug Use During Treatment 82
History of Incarceration 83
Homelessness Among Sample Data Set Respondents 84
Previous Homelessness 84
Current Homelessness 85
Differences Between the Currently Homeless and Those Currently Housed 85
Relative Risk of Current Homeless: 87
Previous Homelessness 87
Race/Ethnicity 88
Gender 88
Sexual Orientation 88
HIV Status 88
Income 89
Drug and Alcohol Use 89
History of Incarceration 90
Multivariate Analyses of Independent and Dependent Variables 90
Logistic Regression Using Independent Variables Present in All Locales 95
Logistic Regression With Only Locations Asking About Respondents' Sexual Orientation 102

Logistic Regression With Only Locations Asking About Respondents' Previous Incarceration....105
Constructing a Homelessness Risk Spectrum....107
Step One in Constructing the Homelessness Risk Spectrum: Logistic Regression....108
Step Two: Calculating Predictive Scores....109
Step Three: Identifying Predictive Score Clusters....110
Step Four: Calculating the Risk Groups....111
Demographic Composition of Each of the Homelessness Risk Groups....113
Risk Group Snapshots....117
Low Risk Group Profile....117
Moderate Risk Group Profile....118
High Risk Group Profile....119
Housing Preferences....122
Serostatus Inclusive Housing Preferences....122
Dyadic Housing Option Preferences....125
Chapter 5 Discussion of Findings....129
Summary of Findings....129
A Homelessness Risk Spectrum....133
Limitations of the Study....135
The Implications of the Convenience Sample....135
Inadequate Explication of an Explanatory Model....137
Limitations of Logistic Regression Analyses....138
Implications of the Findings for Social Policy Development....139
Commitment to Increased Public and Private Low Cost Housing....139
Public Housing Policy and Drug Use....140
Site-Based vs. Off-Site Services....142
System Integration....143
Continuity of Care....144
Implications of the Findings for Social Work Practice....144
Requisites for Culturally-Relevant Services....145
Direct Practice....147
Case Management....147
Cross System Education....149

Administrative Practice 150
Collaboration Across Professions 150
Organizational Capacity-Building 151
Community-wide Practice 152
Education 152
Advocacy 153
Community capacity-building 153
Implications of the Findings for Social Work Research 154
Expanding Our Knowledge of Those at Greatest Risk of Homelessness 154
Evaluative Studies of AIDS Housing Models 155
Prevalence Research 156
Conclusion 157
References 158
Appendix A 171
Appendix B 178

List of Figures

Figure 1 Areas of Scholarship Defining and Informing the Current Study 6
Figure 2 Trends in Gender of People with AIDS 1981-1995 8
Figure 2b Trends in Race/Ethnicity of People with AIDS 1981-1995 8
Figure 2c Trends in Major HIV Exposure Categories 1981-1995 8
Figure 3 Number of Renter Households and Number of Affordable Units Available by Income in 1991 12
Figure 4 Number of Subsidized and Unsubsidized Affordable Housing Units in Millions, 1970-1993 16
Figure 5 The Confluence. Number of Subsidized and Unsubsidized Housing Units Compared to the Number of People Living at the Poverty Level and 125% of the Poverty Level in Millions, 1970-1993 18
Figure 6 Race/Ethnic Group's Percentage of Sample Data Set 64
Figure 7 Sexual Orientation of All Respondents 67
Figure 8 Monthly Income of All Respondents 68
Figure 9 Monthly Income for Male & Female Respondents 69
Figure 10 Monthly Income by Respondents' Race/Ethnicity 70
Figure 11 Monthly Income by Respondents' Sexual Orientation 71
Figure 12a Gender of Entire Sample Compared to Those Who Live Alone and With Only Their Children 73
Figure 12b Race/Ethnicity of Entire Sample Compared to Those Who Live Alone and Those Who Live With Only Their Children 74
Figure 13 HIV Status of Entire Sample 74
Figure 14a Respondents' HIV Status by Gender 75
Figure 14b Respondents' HIV Status by Race/ Ethnicity 75
Figure 15 Covivants of Respondents Who Do Not Live Alone 77
Figure 16 Substance Use of Respondents 78
Figure 17 Substance Use by Gender Group 79
Figure 18 Substance Use by Race/Ethnic Group 80
Figure 19 Substance Use by Race/Gender Group 81
Figure 20 Predictive Scores of Respondents who are Currently Housed and Those who are Currently Homeless 110
Figure 21 Predictive Scores of Respondents who are Currently Housed with Three Break Points 111

Figure 22 Risk of Homelessness Group by Gender Group....114
Figure 23 Risk of Homelessness Group by Race/Ethnicity Group....114
Figure 24 Risk of Homelessness Group by Mean Age of Group....115
Figure 25 Risk of Homelessness Group by HIV Status....115
Figure 26 Risk of Homelessness Group by Monthly Income Group....116
Figure 27 Risk of Homelessness Group by Household Composition....116
Figure 28 Risk of Homelessness Group by Hard Drug Use and Previous Incarceration....117
Figure 29 Feelings About Serostatus-Inclusive Housing For Entire Sample....122
Figure 30 Feelings About Mixed Serostatus Housing By Gender....123
Figure 31 Feelings About Mixed Serostatus Housing by Race/Ethnicity Group....123
Figure 32 Feelings About Mixed Serostatus Housing By HIV Status....124
Figure 33 Feelings About Mixed Serostatus Housing By Sexual Orientation....124

List of Tables

Table 1	Annual Number and Rate per 100,000 Population of AIDS Cases	9
Table 2a	Fair Market Rent (FMR) Compared to 30% of Renters' Median Income	14
Table 2b	Fair Market Rent (FMR) Compared to Poverty Level Income,	15
Table 3	Approximate Percentage of HIV/AIDS Housing Units	38
Table 4	Number of Cases and Percentage of Data Set	43
Table 5	Independent Variables and the Community Data Sets	58
Table 6a	Comparison of CDC Surveillance Data for People with an AIDS Diagnosis	60
Table 6b	Comparison of CDC Surveillance Data for HIV+ People in 26 States with NO AIDS Diagnosis to Sample Data Set Respondents with NO AIDS Diagnosis	62
Table 7	Number of Respondents in Each Race/Ethnic Group	64
Table 8	Race/Ethnicity of Female and Male Respondents	66
Table 8a	Respondents' Race/Ethnicity by Locale	66
Table 9	Respondents' Sexual Orientation by Locale	68
Table 10	Respondents' Average Monthly Income by Locale	69
Table 11	Sample Data Set Respondents Living At or Below Poverty Level	73
Table 12	Respondents' HIV Status by Locale	76
Table 13	Respondents' Age by Locale	76
Table 14	Percentage of Sample Data Set and US Population Using Selected Drugs	79
Table 15	Respondents' Substance Use by Locale	81
Table 16	Comparison of People with History of Incarceration to Those Without on Selected Demographic Variables	83
Table 17	Drug Use Among Those Previously Incarcerated and Those Not Previously Incarcerated	84
Table 18	Comparison of Currently Homeless Respondents with Those Not Homeless	86
Table 19	Substance Use by Homelessness Status	89
Table 20	Relationships Between Independent Variables	92

Table 21 Odds Ratio for Each Independent Variable 94
Table 22a Coefficients of the Logistic Regression of all Independent Variables 96
Table 22b Predicted vs. Observed Homeless and Housed Respondents 97
Table 23a Coefficients of the Logistic Regression of Final Model 100
Table 23b Predicted vs. Observed Homeless and Housed Respondents 101
Table 24 Coefficients of the Logistic Regression of Model Including Sexual Orientation 103
Table 25a Coefficients of the Logistic Regression of a Better Model Including Sexual Orientation Variable 104
Table 25b Predicted vs. Observed Homeless and Housed Respondents When Sexual Orientation Variable is Included 105
Table 26a Coefficients of the Logistic Regression of Model Including Previous Incarceration Variable 106
Table 26b Predicted vs. Observed Homeless and Housed Respondents When Previous Incarceration Variable is Included 107
Table 27a Coefficients of the Logistic Regression for Construction of the Homelessness Risk Spectrum 108
Table 27b Predicted vs. Observed Homeless and Housed Respondents in Risk Spectrum Model 109
Table 28 Descriptive Statistics of Individual Predictive Scores for Respondents Who are Currently Homeless Compared to Those Who are Currently Housed 110
Table 29 Number and Percentage of Sample Across the Homelessness Risk Spectrum and Percentage of Locale Respondents in Each Risk Group 113
Table 30 Demographic Profile of Risk Groups 121

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The Respondents

The 2,856 individuals who contributed information to their local communities and now to this larger set of data in hopes of informing program and policy planners about the specter of living with HIV disease in the shadow of homelessness.

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Dedication

For
Patty Walker

In memory of

Elizabeth L. Dyer
and
Larry A. Morita

For years the dead
were the terrible weight of their absence,
the weight of what one had not put in their hands.
Rarely a visitation--dream or vision--
lifted that load for a moment, like someone
standing behind one and briefly taking
the heft of a frameless pack.
But the straps remained, and the ache--
though you can learn not to feel it
except when malicious memory
pulls downward with sudden force.
Slowly there comes a sense
that for some time the burden
has been what you need anyway.
How flimsy to be without it, ungrounded, blown
hither and thither, colliding with stern solids.
And then they begin to return, the dead:
but not as visions. They're not
separate now, not to be seen, no,
it's they who see: they displace,
for seconds, for minutes, maybe longer,
the mourner's gaze with their own. Just now,
that shift of light, arpeggio
on ocean's harp--
not the accustomed bearer
of heavy absence saw it, it was perceived
by the long-dead, long absent, looking
out from within one's wideopen eyes.

The Change, by Denise Levertov
from *Sands of the Well*

Chapter 1
Introduction

Housing planning and development for people living with HIV/AIDS is occurring with increasing urgency in urban centers and many non-metropolitan areas throughout the United States. While Federal and state resources for housing and housing assistance are shrinking with the dismantling of the American welfare state, a growing number of poor people are acquiring HIV, some surviving years with the disease. For some middle income individuals who contract the HIV virus, loss of full-time employment, and income, moves them to low-income status and, in many cases, a need for assistance with housing costs.

Last year, 1995, marked the point at which more than half a million Americans had been diagnosed with Acquired Immuno-Deficiency Syndrome (AIDS). Human Immunodificiency Virus (HIV) infection is now the leading cause of death among men age 25 to 44 and the third leading cause of death among women the same age (Centers for Disease Control and Prevention, 1996). It is suggested that up to half of all people infected with the HIV virus will need some form of housing assistance during the duration of their illness (Chamberlain, 1993). In the midst of this, planners and service providers (from federal to state to local agencies) find it necessary to identify those at greatest risk of poor housing outcomes, including homelessness, in order to direct a relatively large portion of housing assistance resources toward their situation. The study presented here was undertaken in service to that task.

Overview of the Dissertation

The dissertation will explore the importance of housing resources for people living with HIV/AIDS, and the housing-related issues distinctive to people living with HIV that should inform policy and program development in local communities, and in state and national policy arenas.

First, in Chapter Two, current trends in the demography of HIV disease and its movement into poorer communities will be presented. Then, an examination of the state of the American low-cost housing market and its ability to provide housing for low-income people is presented. To better

understand the situation in which many low-income people with HIV find themselves, homelessness in general and specific to those infected with the HIV virus is discussed. Finally, the current state of AIDS housing is explored and compared to the estimated needs for housing resources.

Secondly, utilizing a data set comprised of information from approximately 2,800 people living with HIV/AIDS from six communities in the United States (hereafter referred to as the *sample data set*), the Findings chapter will present a demographic profile of people living with HIV/AIDS who would be most likely to need housing assistance. Analysis of this study sample will seek to uncover and understand commonalties among people living with HIV/AIDS across communities.

The Findings chapter is comprised of a thorough descriptive analysis of sample data set responses to a needs assessment survey designed for people living with HIV/AIDS throughout several US states. First, it presents the study sample's representation of the national infected community, then it presents a thorough descriptive analysis of several demographic and behavioral characteristics of respondents. Finally, it offers an overview of the housing preferences of respondents analyzed by a number of the previously presented demographic and behavioral variables.

Finally, using the sample data set, the dissertation will seek to understand who is at greatest risk of homelessness. It will identify correlates to homelessness as a precursor to the development of a homelessness risk spectrum for people with HIV/AIDS. Such a risk spectrum may assist policy and program developers in judiciously allocating limited housing resources as potently as possible. Multivariate analysis will be undertaken to test models developed in prior research on housing and homelessness that may help us understand the differential and interdependent impact of several demographic, housing, and behavioral variables on homelessness among people living with HIV/AIDS.

Like the data sets it utilizes, the primary goal of the dissertation is to establish and explore the need for HIV/AIDS housing in the United States. The Discussion chapter presents salient issues that arise from the findings and contextualizes them in larger issues such as poverty among people living with HIV disease and the current low-cost housing crisis plaguing the US. The

chapter also offers suggestions for policy and program planning in housing for people with HIV/AIDS. The dissertation concludes with the implications that the study suggests for the social work profession, including suggestions for additional social work research in this area.

The Significance of this Study for the Social Work Profession

Empirical exploration of the housing issues salient to people living with HIV/AIDS appears to be appropriate for the social work profession. Gaining knowledge about a broad sample of low-income people living with HIV/AIDS may well help to inform national policy decisions about addressing their growing needs. In addition, local communities across the country are currently in the midst of policy and program development related to housing for people within their communities who have HIV/AIDS. They too may find this information helpful in planning and advocacy.

Current changes in the allocation of federal housing funds require communities to conduct planning processes in which housing priorities are determined *across* the community's housing needs (of which AIDS housing is only a part). Beginning in 1997 most federal AIDS housing moneys will no longer be awarded through a competitive proposal process. Funds will be allocated to communities on a formula basis that reflects communities' housing plans (as well as proportion of population in need, etc.). Consequently, it is essential that AIDS-housing planners and providers be prepared to advocate for housing funds and to do so in such a manner that assures that the needs of those at greatest risk of homelessness are met. Identifying risk factors and understanding their relationship to homelessness may assist in this process of planning and prioritizing.

The multiple layers of systemic and individual issues facing planners and providers of housing to people with HIV/AIDS constitutes an environment appropriate for social work study and intervention. With historic commitments to working with underserved and impoverished communities, and guided by theoretical foundations fitting the task of addressing multi-systems situations, the profession may well bring important contributions to the process of fitting community responses to the needs of community members affected by HIV/AIDS. While the American social work professional has not been a key player in national housing policy

development in the past 50 years, itself an interesting topic of consideration, we have a rich history of attention to shelter and related services in the Settlement House Movement of the late 1880's through the 1920's. In addition, professional colleagues around the world view national and local housing issues as appropriate arenas for social work leadership and intervention (Stewart & Stewart, 1993).

Shelter is a basic, human need. Social work interventions, including research, policy development, advocacy, and service provision seem wholly appropriate and wholly necessary. In a recent editorial in *Social Work* that alerts and calls the profession to increased awareness, services, and research in housing issues, Mulroy and Ewalt (1996) suggest that

> "(s)ocial workers who practice in poor communities seek guidance from social work research on the efficacy of social policies and programs and the outcomes of their work. Social workers want to know more about the characteristics of poverty neighborhoods; whether traditionally accepted indicators of housing need are still appropriate; how to measure service needs in neighborhoods and communities that are increasingly diverse and multicultural; and what housing and community development interventions strengthen families, and neighborhoods, particularly from the residents' perspective" (p. 248).

This study addresses many of the practitioners' needs stated above. In so doing it may move our profession and the communities we serve closer to meeting the housing–and related–needs of low income people living with HIV disease. It may alert and educate the profession on the ramifications for the communities of people with HIV/AIDS upon service delivery systems as diverse as child and family welfare, medical care, emergency services, public health, mental health, addiction treatment, and, of course, housing.

Decisions regarding housing for people with HIV/AIDS are located at the confluence of several socio-political, economic, and personal issues. Issues of national housing resource scarcity, poverty and correlated problems among an increasing percentage of people with HIV/AIDS create an environment in which social work interventions may be particularly appropriate. A closer look at each issue may make clear the fit with a profession based on a systems-approach to problem conceptualization and problem-solving. Such an examination follows.

Chapter 2
Contributing Research

Introduction

While issues of housing and homelessness have been foci of scholarly study for centuries, the introduction of HIV/AIDS to the United States in the 1970's renders it a scholarly area in infancy. Very little scholarship exists in the area of housing for people with HIV/AIDS. So in an effort to begin building a new realm of study, one that will ideally be short-lived, several other related areas of study are drawn upon. They inform our understanding of

- the precursors to homelessness,
- the correlates with homelessness,
- the impact of homelessness in the lives of those who experience it,
- the demographic profile of HIV disease and the people it is most likely to infect, and
- the service needs of those people with HIV/AIDS who are also at risk of becoming homeless, in addition to housing.

Figure 1 represents the ways in which several areas of scholarship and disciplines in which they are located, define and inform scholarship about housing for people with HIV disease. It shows that the study of housing for people with HIV/AIDS is informed and defined by scholarship in the areas of epidemiology and demography, specifically those that explore the impact of socio-economic class among people with HIV disease. It also shows that this and other studies of housing for people with HIV/AIDS are informed by economists and demographers who study trends in the housing markets, especially those markets accessed by low income people.

Research on the widely-examined phenomenon of homelessness also inform this study. The study of housing for people with HIV disease draws from a number of scholarly perspectives on homelessness including psychology, social work, demography, economics, and especially sociology.

Figure 1 further represents the professional social work commitment to practice-related research that drives this study. That is research that provides greater understanding, ultimately in the service of planning and

providing systems of care that are, in this case, responsive to the needs of people with HIV and the communities in which they live.

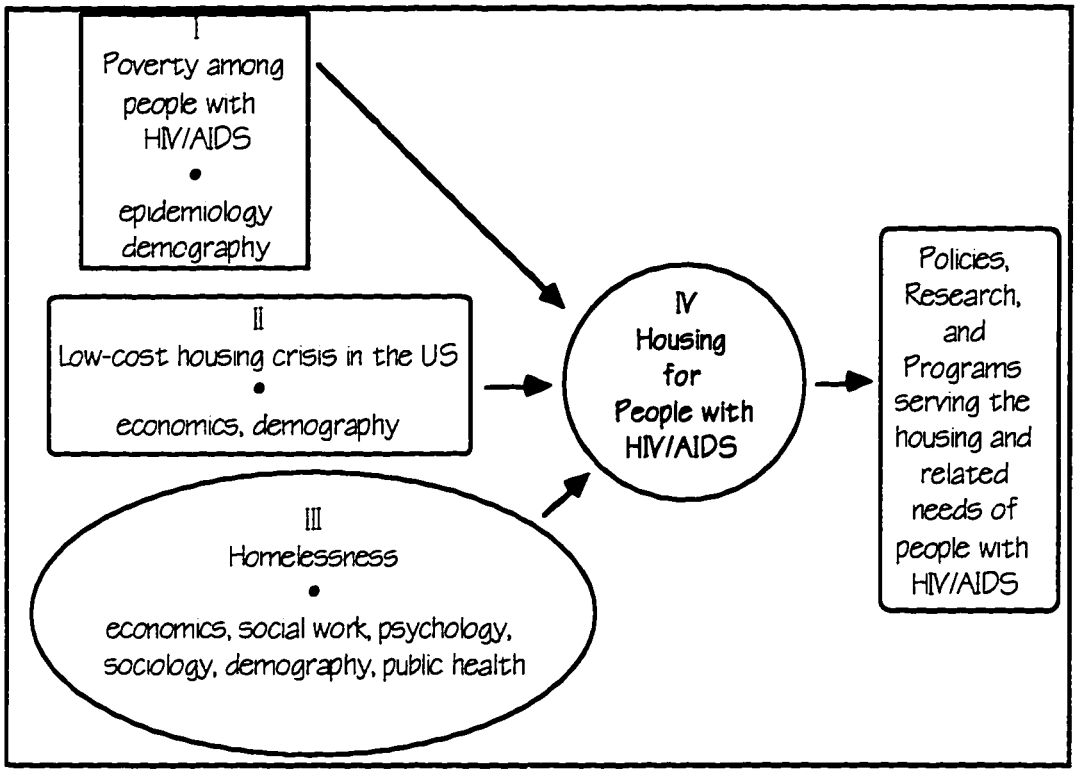

Figure 1 Areas of Scholarship Defining and Informing the Current Study

The remainder of this chapter presents an overview of salient research from the areas mentioned above. The implications of the information for AIDS housing will be discussed throughout this study.

I. Poverty Among People with HIV/AIDS

> *"Today you are working with people who are poorer, sicker, and probably have fewer resources with which to cope with this crisis than earlier in the epidemic".*
>
> Roberta Achtenburg in an address to the 2nd Annual National AIDS Housing Conference, August, 1996

Recent analyses of surveillance data gathered by the Centers for Disease Control suggest that socio-demographic trends in the HIV/AIDS epidemic in the USA are changing. While Caucasian men who have sex with men continue to comprise the majority of HIV/AIDS cases in the country, *the rate of new infections* among this group is decreasing. Simultaneously, the rate

of infection among other demographic groups and among different infection routes are increasing and comprising a consistently larger percentage of American HIV and AIDS cases. For instance, 1995 was the first year in which the proportion of people reported with AIDS who are African American is equal to that of whites (Centers for Disease Control, 1996). HIV/AIDS rates among people of color and women who are exposed to the HIV virus through intravenous drug use or heterosexual intercourse with an infected partner are on the rise (Rosenberg, 1995). Figures 2a through 2c present some of these changes as they have occurred since 1981. Figure 2a shows that the percentage of reported AIDS cases among women increased from 8% in 1981-1987 to 18% in 1993-1995 while the percentage of cases among men decreased from 92% to 82% in the same time period. Figure 2b shows that the percentage of reported AIDS cases among African Americans and Latinos/Latinas increased from 25% to 38% and 14% to 18% respectively over the same time period, while the percentage of whites decreased from 60% to 43%. Table 2c illustrates that the percentage of cases attributed to intravenous drug use (IDU) increased from 17% in 1981-1987 to 27% in 1993-1995 and those attributed to heterosexual sex increased from 3% to 10% while the percentage of reported cases attributed to male with male sexual intercourse decreased from 64% to 45% (Centers for Disease Control and Prevention, 1995).

These trends appear to indicate that HIV disease is on the rise in some communities that are already vulnerable and may have much fewer material or financial resources with which to buoy their members through this crisis.

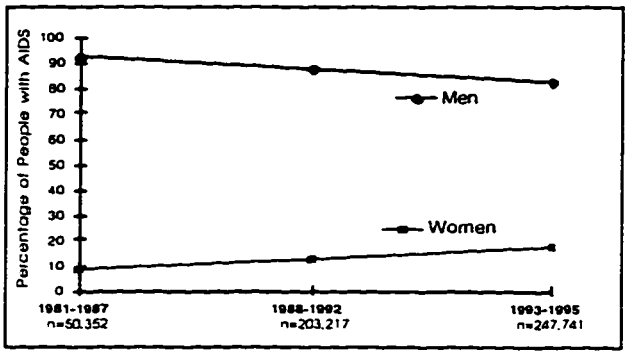

Figure 2a Trends in Gender of People with AIDS 1981-1995 Cumulative n=501,310

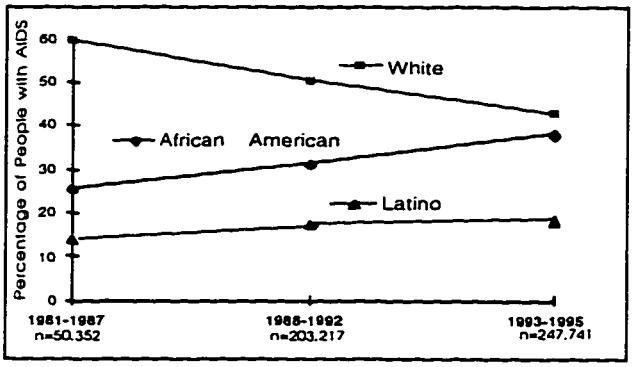

Figure 2b Trends in Race/Ethnicity of People with AIDS 1981-1995 Cumulative n=501,310

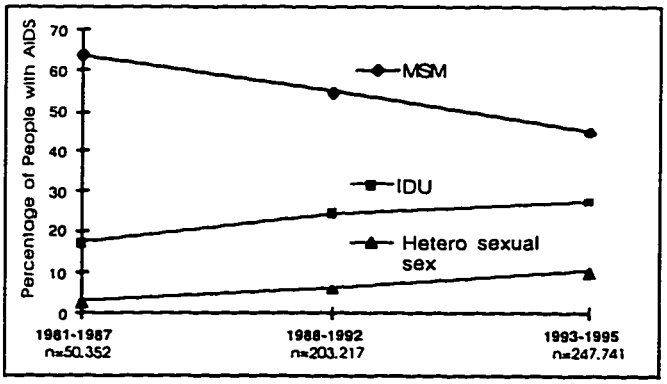

Figure 2c Trends in Major HIV Exposure Categories 1981-1995 Cumulative n=501,310

Overall, most people of color are much more likely than are white people to have AIDS. Table 1 shows the great discrepancy in the rate of AIDS cases in several race/ethnic groups, by gender, in 1995. It shows that the

rates of AIDS cases among African American men and women and Hispanic men are a great deal higher than that for white men. Only Asian/Pacific Islander women have an AIDS rate in 1995 lower than that for white women.

Table 1
Annual Number and Rate per 100,000 Population of AIDS Cases in 1995 by Race/Ethnicity and Gender [1]

Race/Ethnicity	Male		Female	
	Number	Rate	Number	Rate
African American	21,284	190.3	7,680	59.2
Hispanic	11,137	98.0	2,847	25.4
White	26,508	34.3	3,106	3.8
Native American	198	28.4	38	5.2
Asian/Pacific Islander	477	14.0	74	2.0

Reflecting the correlation between gender, race, and class, people in lower socioeconomic groups are over-represented in this changing demographic trend. While national Centers for Disease Control surveillance data do not track the income status of people diagnosed with AIDS, a number of studies have utilized surveillance data (local and national) in concert with other data to suggest that people with low incomes are more likely to contract the HIV virus than those with middle or high incomes. For instance, in a recent study of people with AIDS in Los Angeles County that correlated surveillance data and census track data, Simon, et. al (1995) found that the rate of AIDS was highest in low income neighborhoods (253 per 100,000), lower in middle income neighborhoods (161 per 100,000), and lowest in high income neighborhoods (82 per 100,000). They found that residents of low income neighborhoods accounted for 78% of AIDS cases among African Americans, 67% of AIDS cases among Hispanics, and 47% of AIDS cases among whites. Fife & Mode (1992) conducted similar studies in Philadelphia and found that between 1988 and 1990 annual AIDS incidence per 100,000 residents increased by

[1] Source: Centers for Disease Control, 1996.

21% and prevalence (calculated as the difference between cumulative cases and cumulative deaths) increased by 62%. However, in low-income census neighborhoods, prevalence increased by a startling 113%. In middle income neighborhoods the prevalence rate increased by 88% and high income neighborhoods realized an increase in prevalence of only 14%. The authors' suggestion that "the shifts toward people in poorer neighborhoods imply a need for public funding for AIDS care that is far larger than would be suggested by the general 21% increase in AIDS incidence...(p. 1115)" may be particularly salient in regard to housing, due to its non-entitlement status.

In Seattle, a study of 3,601 high-risk clients at a counseling and testing site, low income clients were more likely to be seropositive than were middle or upper income clients. This held true regardless of gender or race, and whether the clients contracted the HIV virus through unprotected anal or vaginal intercourse or through intravenous drug use (Krueger, et. al, 1990).

Even for many of those earning a living wage prior to diagnosis, developing AIDS may mean a significant loss of income. In a study of seropositive and seronegative gay and bisexual men in San Francisco (Kass, 1994), men with AIDS were more than 2½ times more likely to lose full-time employment over a six month period than were seronegative men. Not surprisingly, the job losses were, in turn, highly correlated with a loss in income and loss of private health insurance.

II. Affordable Housing Scarcity in the United States for the Most Impoverished

Issues in the US housing market and federal housing assistance areas have a profound impact on the availability of affordable housing and/or funds for housing. With housing assistance limited to the amount of money allocated by the US Congress each year, help with housing costs is the only form of "basic need" assistance that is not considered an entitlement in our current welfare system. As a consequence, only about a third of the citizens who are eligible for housing assistance actually receive it (Dolbeare and Kaufman, 1995; Reyes & Waxman, 1987, US Department of Housing and Urban Development, 1996).

Simultaneously, opportunities for low-income home ownership have seriously decreased over the past decade (Johnson & Sherraden, 1992) and the percentage of poor renter households have increased (Apgar, 1989). The need for rental assistance has increased every year since the 1970's, and in some cases the waiting list for subsidized housing is two years (Reyes and Waxman, 1987), a reality of some irony for people with a terminal illness.

The demand for and the supply of low cost housing have been rapidly moving in directions opposite from one another since the mid 1970's. Poor housing outcomes for impoverished Americans, including increasing homelessness, can be largely explained by the simultaneous increase in poor renter households and the decrease in affordable rental units for the lowest-income Americans.

The Gap Between Affordable Housing and Incomes

Currently, the standard used to define "affordable housing" by the US Department of Housing and Urban Development (HUD) is housing that consumes no more than 30% of one's household income. There are some problems with this standard, however. First, it does not make any allowances for the differential impact that income has on people's ability to afford additional needs. For instance, someone with an annual, full-time minimum wage ($4.25/hour) income of $8,500.00 could pay $2550.00 (30% of $8,500) on housing (if fortunate enough to find housing at less than $213.00/month), leaving only $5,950.00 (less than $500.00 month) to cover all other living costs throughout the year. Using the same standard, someone with an annual income of $30,000.00 could pay $10,000.00 on housing ($833.00 per month) and still have $20,000.00 to cover other living costs throughout the year.

In fact, the poorest households in the country are those for whom affordable housing is least accessible (US Department of Housing and Urban Development, 1996). Figure 3 shows that it is only when annual incomes rise above $10,000.00 do available affordable units equal or exceed the number of people needing them. There are fewer available affordable housing units for the most impoverished in the country. Figure 3 shows that In 1991 there were 7.6 million renter households with incomes

under $10,000.00 yet there were only 4.4 million units affordable by those making less than $10,000.00 (Dolbeare & Kaufman, 1995).

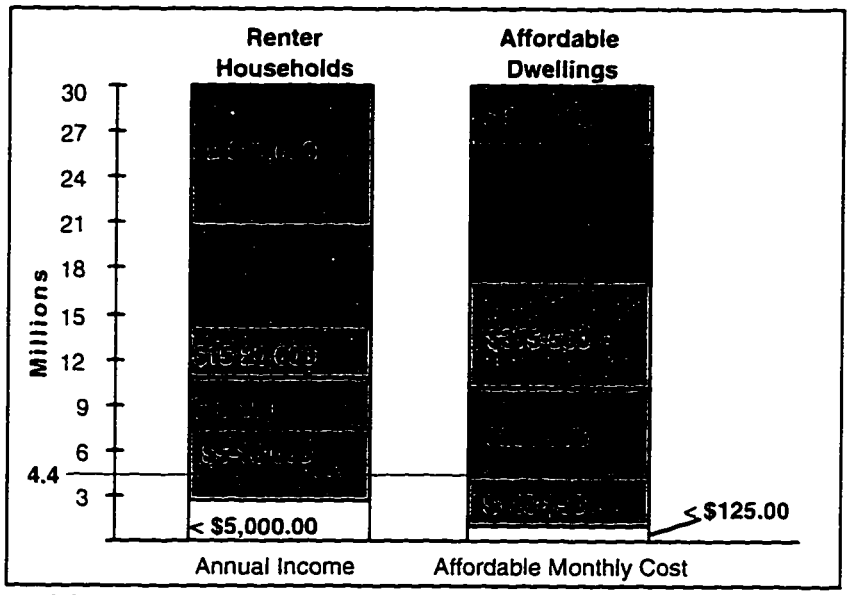

Figure 3 Number of Renter Households and Number of Affordable Units Available by Income in 1991.

The HUD 30% standard also does not take into consideration the number of family members in the household even though this is a significant variable in attaining affordable housing. Generally speaking, the larger the family, the larger (and more expensive) the housing must be. This is particularly significant for households with only one wage earner who may have one or more dependents. For instance, in a household of 3 with one minimum wage earner and two children a unit with at least 2 bedrooms (the median estimated Fair Market Rent [2] in the US is $523.00/mo. or $6,276.00/yr.) is appropriate. A single minimum wage earner would find a one bedroom unit (FMR cost for a one bedroom unit is $417.00/mo., or $5,004.00/yr) appropriate. Over a year, the family would have $2,224.00 remaining to cover living costs of three people while the single individual would have $3,496.00.

Family size differentials coupled with income differentials discussed above lend additive inequities to HUD's 30% across-the-board standard. The 30%

[2] The estimated Fair Market Rent (FMR) is established by HUD and represents the rent and utility costs at the 45th percentile for local rental units, excluding subsidized units and new construction.

standard holds different significance for the single parent raising two children on a nurses aid salary than it does for a single physician with no dependents.

In the absence of a more complex or sensitive measure of housing affordability the HUD standard will be used here to demonstrate the gaps between income and affordable housing costs, particularly for those who are living on fixed and low incomes.

Table 2a presents data for the United States and for each of the locales represented in the sample data set. It shows the Fair Market Rents for one and two bedroom units and the income necessary to afford them in the communities represented in the data set [3] and for the median Fair Market Rent in the US at large. It also shows the estimated percent of renter households that are unable to afford housing at the 30% level. For instance, the median Fair Market Rent for a one bedroom apartment in the US is $417.00. The income at which that is affordable (30% of one's income) is $16,667.00. Comparing this information to US Census and American Housing Survey data from 1994, it is estimated that 39% of the renter households in the US are unable to afford the median Fair Market Rent (Dolbeare & Kaufman, 1995).

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[3] Contra Costa County is not included in the table. However, nearby Oakland is included in the table and these figures may serve as an approximation of costs in Contra Costa County.

Table 2a
Fair Market Rent (FMR) Compared to 30% of Renters' Median Income [4]

	US Median	Phoenix	Oakland	San Bernardino/ Riverside	Chicago	Washington State
Fair Market Rent (FMR) for 1 bdrm apt	**$417.00**	$409.00	$651.00	$518.00	$587.00	$472.00
FMR for 2 bdrm apt	**$523.00**	$513.00	$815.00	$632.00	$699.00	$599.00
Income necessary to cover FMR, 1 bdrm at 30% of income	**$16,667**	$16,360	$26,040	$20,720	$23,480	$18,899
Income necessary to cover FMR, 2 bdrm at 30% of income	**$20,925**	$20,520	$32,600	$25,280	$27,960	$23,947
Est. % of renter households unable to afford FMR, 1 bdrm, at 30% of income	**39%**	Arizona 37%	California 47%		Illinois 49%	40%
Est. % of renter households unable to afford FMR, 2 bdrm at 30% of income	**47%**	Arizona 47%	California 56%		Illinois 57%	48%

Table 2b shows the Fair Market Rent for one and two bedroom units again. Then it shows the percentage of the poverty level income necessary to pay those rents for one and two person households. The table uses 1994 figures. In 1994 the poverty threshold for one person on the mainland US was $7,360.00 (Alaska: $9,200.00; Hawaii: $8,470). The poverty threshold for a two person household in 1994 was $9,840.00 (Alaska: $12,300.00; Hawaii: $11,320). In the United States, there are no states, and very few cities, in which a poverty level income is sufficient to make the Fair Market Rent affordable. Most often two, and sometimes three times the poverty level is necessary to afford the Fair Market Rent.

Following data on poverty level incomes, Table 2b presents the same data for AFDC incomes (and households of three and four) and for the SSI Disability income. It shows that in no communities are either types of grants adequate to afford Fair Market Rents at the 30% level. Of particular relevance for people living with HIV and receiving SSI, the Department of Housing and Urban Development (1996) reports that persons with disabilities are more likely than other low income people to experience extreme rent burdens.

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[4] Source: Dolbeare and Kaufman, 1995.

Table 2b
Fair Market Rent (FMR) Compared to Poverty Level Income, Maximum AFDC Income, and Average SSI Income [5]

	US Median	Phoenix	Oakland	San Bernardino/ Riverside	Chicago	Washington State
Fair Market Rent (FMR) for 1 bdrm apt	**$417.00**	$409.00	$651.00	$518.00	$587.00	$472.00
FMR for 2 bdrm apt	**$523.00**	$513.00	$815.00	$632.00	$699.00	$599.00
Income necessary to cover FMR, 1 bdrm as % of poverty level for *1 person*	**227%**	222%	354%	282%	319%	257%
Income necessary to cover FMR, 1 bdrm as % of poverty level for *2 people*	**169%**	166%	265%	211%	239%	192%
Income necessary to cover FMR, 2 bdrm as % of *poverty level* for *3 people*	**170%**	167%	265%	205%	227%	194%
Income necessary to cover FMR, 2 bdrm as % of *poverty level* for *4 people*	**141%**	139%	220%	171%	189%	162%
Income necessary to cover FMR, 2 bdrm as % of max. *AFDC* grant for *3 people*	**143%**	148%	134%	104%	190%	110%
Income necessary to cover FMR, 2 bdrm as % of max. *AFDC* grant for *4 people*	**120%**	123%	113%	87%	169%	93%
Income necessary to cover FMR, 1 bdrm as % of average SSI grant for *1 person*	**99%**	97%	154%	123%	140%	119%

The disparity between income and Fair Market Rents for the poorest Americans is a growing trend and one exacerbated by a loss in rental units below the FMR. The following sections present information about this loss and further explicates a trend that places increasingly more poor Americans, especially those on fixed incomes, at risk of homelessness and other poor housing outcomes.

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[5] Sources: Dolbeare and Kaufman, 1995 and US Social Security Administration.

Decline in the Number of Affordable Housing Units

A severe loss on the supply side of the low-cost housing equation has coincided with and exacerbated the inability of low incomes to pay for existing rental housing. Most of this loss has occurred in the unsubsidized housing market. More than 75% of the unsubsidized rental units in the US that were affordable by the poorest Americans--four million units--were lost between 1970 and 1989. In that same time period, only one million units of subsidized housing (including units subsidized with vouchers or certificates) were added to the US housing market.

These losses are worst in urban areas. In the late 1970's nearly half of the single room occupancy units were lost nationwide (Shinn & Gillespie, 1994). While the rapid loss of urban, low cost housing declined by the mid-1980's, in a four year period in the late 1980's and early 1990's fully a third of all extremely low cost, unsubsidized rental units in urban areas were lost. In that same period of time virtually no new construction of extremely low cost rental units occurred to offset this loss (US Department of Housing and Urban Development, 1996).

Figure 4 shows the loss in unsubsidized housing units between 1970 and 1993. It shows the increase in subsidized units, and indicates the cavernous gap between affordable housing unit loss and affordable housing unit additions.

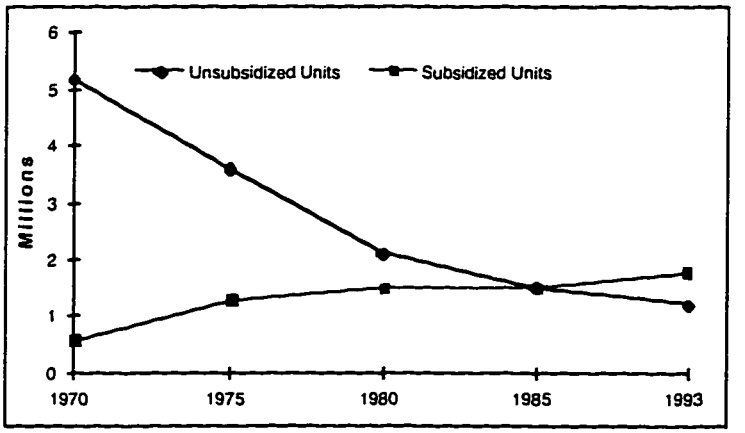

Figure 4 Number of Subsidized and Unsubsidized Affordable Housing Units in Millions, 1970-1993 [6].

[6] Sources: Shinn & Gillespie, 1994 and US Departement of HUD, 1996.

Reasons for Supply Decline

There are several key reasons for the decline in unsubsidized affordable units. Owners of rental units that have housed the poorest Americans are increasingly unable to maintain those units at the $100.00-300.00 per month rent level (the high end of which is out of reach of many people living at or below the poverty threshold). In some of these cases, units are not maintained and are eventually lost to the housing market due to abandonment. The incomes of the poorest renters in the US have not kept up with the costs of living, let alone the costs of housing maintenance.

The decline of affordable, unsubsidized housing is also due to the widespread gentrification of American metropolitan areas. The upgrading of low rent units to higher rent units (the most common reason for low cost housing decline), conversion of rental units to condominiums or non-residential use (the second most common reason for loss of low cost units), and demolition of housing units for replacement by retail and office space have all contributed to the decline represented in Figure 4 (Apgar, 1989; Shinn and Gillespie, 1994; US Department of HUD, 1996).

The Confluence of Loss of Real Income and Loss of Low-Cost Housing Units

A crisis in low-income housing has been defined in the past two and a half decades by the confluence of a rapid rise in rental costs and the inability of the real income of poorest Americans to rise at the same rate. Since 1970 the number and percentage of Americans living below the poverty line has increased. For instance, in 1970, 25.4 million Americans or 12.6% of the US population, were living below the poverty threshold. In 1993, 39.3 million Americans or 15.1% of the US population were living below the poverty threshold. Figure 5 presents this trend with the information from Figure 4 above representing the number of affordable housing units. It shows the great, growing discrepancy between the most impoverished and the number of affordable housing units available to them. However, it actually *underrepresents* the number of units available to the poorest Americans because it does not adjust for the number of people in low to moderate income brackets that are living in rental units affordable to those living below the poverty level (US Department of HUD, 1996).

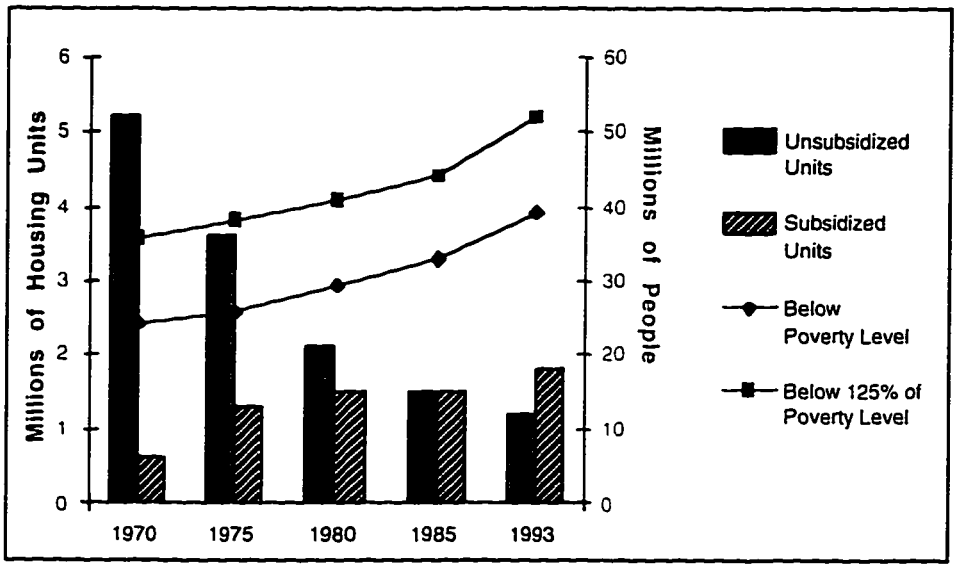

Figure 5 The Confluence. Number of Subsidized and Unsubsidized Housing Units (as in Figure 4) Compared to the Number of People Living at the Poverty Level and 125% of the Poverty Level in Millions, 1970-1993 [7].

Given the growing percentage of low income people being infected by the HIV virus and their future, if not current, dependence on public assistance through SSI or AFDC (or both), the low-income housing crisis described above has alarming significance for people with HIV and those who seek to serve them. It may be safe to say that, except for those with more wealthy kith or kin caretakers, all people with HIV who are living on public assistance are at significant risk of homelessness or substandard housing. If they are not at risk of homelessness, they are most certainly at risk of inadequate housing--housing that is unsafe, overcrowded (a particular threat to those with vulnerable immune systems), lacking plumbing and/or kitchen facilities, unsanitary, etc.

Equal Access and Housing

While this dissertation does not address the significant issue of equal access to housing, it would be remiss to fail to acknowledge the role of race/ethnicity in housing access, particularly in light of the relevance of race/ethnicity in the HIV/AIDS epidemic. As more people of color contract the disease, a greater percentage of the people with HIV will be at risk of homelessness because people of color are more likely to be poor (US

[7] Sources: Shinn & Gillespie, 1994; US Departement of HUD, 1996; and The Reference Press, 1995

Bureau of the Census, 1995) and they are more likely to be discriminated against in the housing market (Baker, 1994; Massey & Denton, 1993; Weicher, 1989).

III. Relevant Research on Homelessness

The movement of HIV disease into low-income communities and the paucity of low-cost housing resources for people in low income communities indicate that a spectrum of housing resources will be an essential component of care services for people living with the disease. While it is impossible to identify just one cause of homelessness (see next section), research clearly indicates that poverty is a precursor to homelessness and those who are poor are more likely to become homeless than those who are not poor (Elliot and Krivo, 1991). Housing those who are sick and homeless and preventing HIV-infected people at risk of homelessness from becoming homeless, may in fact, dominate the priorities of organizations and communities providing AIDS housing and services to people with AIDS.

Given this priority to serve homeless and "pre-homeless" people it may be helpful to examine previous research on homelessness in order to guide housing advocacy, policy, and planning for people with HIV/AIDS. In addition to the new, though growing, body of research focusing on homelessness among people living with HIV disease, much of what we know about homelessness in general can inform practice and on-going research on housing for people with HIV disease. A select review of pertinent research is summarized below.

Demographic Profile of the Homeless

Gender

Shlay and Rossi (1992) conducted a meta-analysis of 60 homeless studies and found that, on average, $^3/_4$ of homeless respondents were male. Indeed, men are at greater risk for poor housing outcomes such as homelessness (Baker, 1994; Munro and Smith, 1989). However, Baker (1994) identifies a number of variables that differentiate the experiences of, and pathways to, homelessness for men and women including family composition, especially the presence of children (unlike homeless men,

homeless women are just as likely to have an active relationship with another homeless person (usually her children) as to be alone), ethnicity (homeless women, especially those with children, are more likely to be women of color than white women), age (homeless women, especially those with children, on average, are younger than homeless men) and personal disability (homeless women are more likely to have a history of mental illness and less likely to have a history of substance abuse than are homeless men), each of which is salient to an examination of housing for people with HIV/AIDS.

Ethnicity

Though region of the country has a great influence on the racial/ethnic composition of the homeless population (homeless populations in the south and west are largely white and largely Black in northern areas), African Americans and Native Americans, are, on average, over represented among homeless people while whites, Asian Americans, and Latina/os are underrepresented (Reyes & Waxman, 1987; Shlay and Rossi, 1992; US Department of HUD, 1989). Since African Americans and Native Americans are more than twice as likely to be poor than whites (US Bureau of the Census, 1995), the over representation of Native Americans and African Americans may be as much a function of income as race/ethnicity.

Age

The mean age of participants across 36 studies was 36.5 years old, standard deviation=2.68, and the median age was 36.97, standard deviation=4.33 (Shlay and Rossi, 1992). These figures are often replicated in "snapshot" counts of homeless populations (Reyes & Waxman, 1987; US Department of HUD, 1989). The median age in the US is 34 years old (The Reference Press, 1996). It's interesting to note, though that the range of ages among those who are homeless is smaller than in the larger population. The elderly and the very young (traditionally deemed more vulnerable) are underrepresented in homeless populations, probably due to successful income transfer and elderly housing programs.

Income

Long-term unemployment is common among homeless populations throughout the country and as one would expect, homeless people are extremely poor. The Shlay and Rossi (1992) meta-analysis found average yearly incomes of $1236.00-$2088.00 across the 15 studies that gathered income data from respondents. Twenty to twenty-five percent of respondents reported no income whatsoever. Even in studies that found the highest income among homeless people ($4000.-$4800.00 year) that income was inadequate to cover housing and all other essentials. A relatively small percentage of homeless study participants received public assistance. On average, 20% received General Assistance (ranging from 4% to 55% in the Shlay and Rossi meta-analysis of 26 studies), 10% received SSI (range= 2% to 38% in 31 studies), and 8% received AFDC (range= 1% to 25% in 15 studies. This number was highly influenced by the percentage of women in the studies).

Family Status and Social Support Networks

Single people are more likely to be homeless than are those who are married. In fact, in their meta-analysis, Shlay and Rossi (1992) found that only 13% of homeless participants in 41 studies were married. In their study of 722 homeless people in Chicago, Rossi & Wright (1987) found that only 9% of respondents were members of households. These were virtually all women and their children. This finding is not consistent across other studies of homelessness, however.

The number of families who are homeless is difficult to consistently and accurately enumerate, largely because they are not as visible as single homeless people. They do not generally congregate in specific locations. Also they often "double up" with kin or kith. (Though these families may be literally "housed" they may be only one argument away from literal homelessness.) While the conventional wisdom among homeless advocates and service providers is that families, especially single-parent families, are the fastest growing segment of the homeless community there are no enumerative studies that support (or counter) this assumption. However, in a non-enumerative study conducted by the Department of

Housing and Urban Development (1988) managers of shelters and housing voucher programs reported that the proportion of shelter beds allotted for families had increased from 21% in 1984 to 40% in 1988.

In their study, Rossi and Wright (1987) found that many homeless people "are helped out by their families and friends for relatively long periods of time, but the patience, forbearance and resources of benefactors eventually run out with literal homelessness resulting" (p. 23). Suggesting that kin and friendship networks are the first line of defense for the very poor, the homeless are those for whom this line of defense has failed:

> "The homeless therefore are the long-term very poor who have been unable to maintain supportive connections with (or have been rejected by) their parental families and friends and who have not been able for a variety of reasons to establish their own households. Long-term abject poverty, rejection by family and friends, and difficulties in establishing and maintaining normal social networks are in turn no doubt related to disability levels. Persons with serious disabilities on the scale reported here are likely to experience difficulties in connecting with full-time lasting employment and also in maintaining their shares in the webs of reciprocity that constitute the support structures of kin and friends" (Rossi & Wright, 1987; p. 26).

They also note that the friends and families of the poor are usually very poor themselves, thinning the line of defense against homelessness. "If the person in question presents behavioral difficulties (for example, mental illness, episodes of drunkenness, trouble with the police) and the prospect of being dependent more or less indefinitely (for example, as the period of unemployment lengthens), the line (of defense against homelessness) would become thinner still" (Rossi & Wright, 1987; p. 26).

Similarly, homeless people have a smaller social network than do poor people who are not homeless (Sosin, et. al., 1988). Shlay and Rossi (1992) found that, on average, across 14 studies, 36% of homeless people surveyed said they had no friends. Across 18 studies 31% of homeless respondents, on average, had no contact with family members.

In their study of homeless people in Chicago, Sosin, et al. (1988) found that homeless respondents were more likely to have been raised in foster care than the general population. This seems a significant finding, indicating that early in life, these people experienced at least the trauma of family

dissolution and/or chaos, if not child abuse, extreme neglect, or the death of a parent or parents.

Health, Mental Health, and Substance Abuse

Shlay & Rossi found relative consistency across 20 studies of homeless people in which respondents were asked about their health. On average, 38% of respondents reported themselves to be in bad health. Whether or not poor health plays a role in precipitating homelessness, it is fair to say that once homeless one's health status deteriorates considerably through consistent stress, exposure to harsh environments, sleep deprivation, poor hygiene, interpersonal violence, and inadequate diet. Cohen and Burt (1990) found that, on average, homeless people eat less than two meals per day and often do not eat for days. In light of the wasting nature of HIV disease this is exponentially significant.

The assessment of mental illness among homeless populations is muddied by the diversity of methods utilized for assessing and defining mental illness. The differential methods (from the use of psychometric measures to the use of professional observations) account for a wide range of prevalence findings (Shlay and Rossi, 1992). There is serious critique of the uncritical use of standardized psychiatric measures with homeless people (Snow, et al,. 1994) and when an illness is indicated, temporal ordering is often impossible to discern. For instance. while studies of homeless people have found a high prevalence of depression among respondents (Toro, et. al., 1995), it is impossible to determine if depression preceded losing one's home or (understandably) developed as a result of becoming homeless and enduring the stress of survival on the streets.

Regardless of temporal issues in relation to homelessness and mental illness, there is evidence that mental health issues are salient among the homeless. Clearly, the deinstitutionalization of thousands of seriously mentally ill people without sufficient community-based supports to serve their needs has increased the proportion of the impoverished and homeless with mental illness. Most scholars and advocates agree that homelessness is a mental health issue (Toro & Warren, 1991; Elliot and Krivo, 1991; Hamid-Walid, et. al, 1993)

Shlay and Rossi (1992) suggest that 25%-30% of homeless have a serious mental health problem. In their meta-analysis of 40 studies of homeless people they found a range of 10% to 100% of respondents had been admitted to a psychiatric hospital. Keeping in mind that the meta-analysis is influenced by studies within psychiatric hospitals, they found that, on average, 24% of respondents across all studies have been admitted to a psychiatric hospital.

In an effort to distinguish homelessness from poverty, Toro, et. al., (1995) conducted a rigorous, though small, study comparing 59 currently homeless respondents to 31 respondents who were formerly homeless and 54 respondents who had never been homeless but utilized food banks and meal programs (total n=144). They found no difference between groups in severe mental illness rates. However, the amount of psychological stress did differentiate the groups, with homeless respondents experiencing higher levels. In a similar study at meal sites, Sosin (1992) found that various deficits like mental illness showed relatively little differentiation across groups of vulnerable populations.

However, while Toro, et. al. (1995) found no statistically significant difference in rates of severe mental illness across the three groups they studied (the currently homeless, the previously-though-not-currently homeless, those who had never been homeless), it may be more illuminating to compare the rates to the general public. It makes intuitive sense to postulate that people with severe mental illness who depend on public disability assistance would be impoverished due to the wholly inadequate stipends (the average monthly SSI-disability stipend across the US is approximately $474.00). Indeed, all three groups have rates of mental illness two to four times that of the population in general based on DIS/DSM-III criteria and number of psychiatric hospitalizations (Toro et al., 1995).

Toro, et al (1995) also found that the rate of substance abuse, as defined by lifetime Diagnostic Interview Schedule (DIS)/DSM-III diagnosis of alcohol or drug abuse or dependence, did distinguish the groups. The DIS/DSM uses a structured interview protocol to gather data that is later computer-analyzed to yield a lifetime and current prevalence of psychiatric disorders

(including substance abuse/dependence) defined in the DSM III (or currently, the DSM IV). Sixty-nine percent (69%) of those currently homeless were diagnosed with a substance abuse disorder, compared to 58% of those who had previously been homeless, and 35% of those who had never been homeless (which is more than two times the normative population substance abuse rate of 16%).

In their meta-analysis, Shlay and Rossi (1992) found that, on average across 22 studies, 29% of homeless respondents had been admitted to a detox program. On average across 27 studies, 27% of respondents were addicted to alcohol. The authors point out that this indicates that the majority of homeless people are not substance-addicted.

Incarceration Rates Among the Homeless

Shlay and Rossi's (1992) meta-analysis found that, on average, 41% of the homeless population represented in the meta-analysis had experienced some form of incarceration. On average, 18% of homeless respondents had been imprisoned on felony charges. A third had been imprisoned for misdemeanors. The authors remind the reader that homeless people are more likely than the general public to be picked up by police for bizarre behavior or because they seem dangerous to others or self. In fact, in some municipalities, people can be charged with a misdemeanor offense if found loitering.

Prevalence of Homelessness

Counting the homeless successfully has baffled and divided demographers and come under the attack of homeless advocates and service providers. Perhaps the greatest barrier to assessing the prevalence of homelessness is determining a definition of homelessness. Some things are easily agreed upon: those living in shelters or on the streets are considered homeless by all who seek to enumerate the homeless population. There is less agreement on whether or not to include those "crashing" at a friend's house or living day by day in a hotel, for example, in a count of homeless people.

Belcher, et. al., (1991) suggest that "doubling-up" with friends or family members—a condition they term "marginal homelessness"—is the first stage

in a three stage model of homelessness. Marginal homelessness, if not addressed and ameliorated, can lead to more advanced stages of homelessness that are characterized by bouts of street and/or shelter life.

In 1990, the US Census Bureau attempted to enumerate the homeless, but only a partial count of those living *outside* of shelters that was inconsistent across cities was conducted. In a study to determine the probable effectiveness of the US Census surveyors in counting homeless people, decoy homeless people were placed in five urban sites. Wright and Devine (1995) report that while Census surveyors were extremely successful in counting the homeless in shelters (an estimated 90% of all people living in shelters were counted), the study found anywhere from only 22% to 66% of the homeless on the street were counted. Undercounting was attributed to people crashing with a friend or family member and therefore not counted, others staying with a john/trick, sleeping in a car in a residential neighborhood, in the hospital, staying in public setting in which they wouldn't be noticed (e.g. a restaurant, bus station, airport, etc.), and people not found because of their efforts not to be seen and to sleep through the night.

Attempts to estimate the number of homeless people by gathering data from key informants such as shelter staff and housing advocates have produced mixed results. Estimates have ranged from 210,00 (US Department of Housing and Urban Development, 1984) to 1.5 million (Hombs & Snyder, 1982) and have utilized methodologies with varying evidence of validity and reliability (Rossi, 1989).

Attempting to assess the prevalence of homelessness through a different approach, Link et al (1995) used a randomly selected sample to conduct phone interviews and found that 6.5% of population (12 million) has been literally homeless sometime in their lives. An additional 8.7% of population (an additional 16 million) has "doubled up" with friends or family ("because you had nowhere else to live and could not have afforded anyplace else like a boarding house, a YMCA/YWCA, or low cost hotel") for a total of 15.2% of the US population (28 million).

Several local attempts to count the homeless have been conducted. For instance, Culhane, et al (1994) analyzed unduplicated counts of people

entering shelters in Philadelphia and New York City found that 2.8% of the Philadelphia population had used shelters over a three year period and 3.3% of the New York City population had used a shelter over a five year period. Needless to say, this approach counted only those homeless people who sought out shelter in the cities' formal shelter systems, and only counted them in two cities.

The discrepancy in national homeless enumeration spans from 200,000 to 3 million. In discussing this discrepancy the editor of a special homelessness edition of the *American Journal of Orthopsychiatry,* Ellen Bassuk (1995), an experienced researcher in the field of homelessness among children, writes

> "Why count? The ostensible purpose of counting is to delineate the scope and size of the homeless problem so that scarce resources can be appropriately allocated. But the magnitude of the difference in counts is not trivial; it varies by a factor of seven to ten. Imagine arranging a dinner party and not knowing whether five or 50 people are going to show up! Yet, even if counting homeless people could be done accurately, we must ask if it is an exercise in folly. The current gap between the needs of homeless people and the available resources such as affordable housing is so large that even the most sympathetic administration would be unable to lessen it significantly--and quantifying this desperate situation is unnecessary (pg 318)."

Her conclusion is startling and discouraging. However, it may move us in directions that are already indicated by the scarcity of resources available to alleviate homelessness: to focus homelessness prevention upon those who are marginally homeless (Belcher, et al., 1991) and intervention efforts upon those most vulnerable and least likely to emerge from homelessness under their own power.

Duration of Homelessness

In light of the high prevalence rates found in studies such as the national phone interview study described in the previous section (Link, et al., 1995) it appears that it may be important to delineate people for whom homelessness is a one-time, short-lived experience from those for whom homelessness is a chronic or intermittent experience.

It is difficult to definitively determine the average duration of homelessness due to the intermittent nature of the experience. People who are homeless

over a long period of time often find short term housing opportunities on a sporadic basis. Due to this it is widely accepted among homelessness researchers that to determine duration of homelessness research participants are asked about the length of time since their first episode of homelessness or the length of time since they lost their permanent housing.

Shlay and Rossi's meta-analysis found that the average time spent homeless was slightly less than 2 years. Only 2 of the studies they analyzed reported average homeless durations less than 14 months. However, the picture is clouded by the fact that participants in the majority of samples they examined were homeless for less than six months. It appears that there are a significant number of people who have been homeless for extremely long periods of time, though the majority of homeless people experience short bouts of homelessness.

In their study of 722 homeless Chicagoans, Rossi and Wright (1987) found that 31% of the homeless people they surveyed had been homeless less than two months. Interestingly, two months was the mode, compared to a median number of months since last having a home of 7.6 months and a mean of 21.9 months. Twenty-five percent have been homeless for two or more years. The remaining 44% had been homeless for two or more months, but less than two years. Here again, there appears to be a sizable proporation of people for whom homelessness is a long-term lifestyle, while the majority of respondents experience shorter periods of homelessness. Of course this was only a "snap shot" of 722 homeless people. There is no way to know how long will actually be the duration of homelessness among the survey participants--a dilemma in most studies of homelessness duration.

A model offered by Belcher, et al. (1991) may be helpful in understanding homelessness duration as well as in defining homelessness for enumeration purposes. As mentioned in the previous section, the authors offer a three-stage model for a continuum of homelessness. "Marginal homelessness" describes those people who may have lost their housing but have the opportunity to live with kith or kin. The marginally homeless generally live at or below the poverty level and utilize many of the services designed to serve homeless people including food lines, street-based health clinics, and

clothing banks. A great deal of energy is spent avoiding homelessness. However, even a small crisis, or unexpected expenditure, can mean the inability to pay rent and subsequent homelessness. The episode of homelessness may be short-lived because of connections with informal support systems, service providers, and an identity as a member of mainstream (housed) society. But because of their extremely low income this process may be frequent.

People who experience "recent homelessness" (less than 9 months since losing their permanent housing) may actually stay in shelters or live on the street for extended, erratic periods of time as their relationships with friends and family have become strained. They are likely to deal with problems such as depression, substance abuse, low self-esteem, and shame. They are characterized by a hope, however, that they will regain their housing, job, and social standing in mainstream society.

"Chronic homelessness" describes the experience of those who have been homeless for more than a year. In this case, people accept homelessness as the normative way of life. Life is characterized by severe symptoms of depression, anxiety, paranoia, substance dependence, and socially pathological behaviors, that "result from extreme situationally derived sources of stress" (p. 90). The authors suggest that people move from "recent" to "chronic" homelessness because economic opportunities are reduced, social support systems in mainstream society have deteriorated, and/or "long-term inadequate diet, ill health, and social decompensation begin to take their toll...(causing) the individual to lose his or her ability to plan and implement strategies to avoid (chronic homelessness)" (p. 90).

The issues raised here by the wide variations in duration among the homeless population offer significant information for service provision. Services to the "marginally homeless", those who may fall into homelessness sporadically and shortly due to a vulnerable economic status, are decidedly different from those designed to meet the very different needs of the "chronically homeless" or even the "recently homeless". These services may be further informed by a greater understanding the causes of homelessness.

Causes of Homelessness

The desire to identify a cause or causes of homelessness is great. Afterall, if we could find the cause(s) of homelessness we could focus our resources and services on preventing it.

There are two major bodies of literature on the causes of homelessness. Many of the issues in both bodies of literature have already been discussed in previous sections of this chapter. One body of literature focuses on the role of personal problems such as mental illness, drug abuse, and alcohol abuse (Fischer, et al. 1986; Roth & Bean, 1986). The other body of literature focuses on structural problems such as poor economic and social conditions, loss of low income housing, severely limited public mental health services, the changing of the US economy from industrial to largely service-based, and high unemployment (Bohanon, 1991, Elliot & Krivo, 1991; Gilderbloom and Applebaum, 1988; Rossi, 1989; Rossi & Wright, 1987; Wright and Lam, 1987).

In reality, however, it appears more likely that these two large areas are inextricably related. In a discussion on the confounded nature of structural and personal problems, Elliot and Krivo (1991) suggest that

> "(u)nder unfavorable structural conditions, those suffering from personal problems may be the most vulnerable to becoming homeless. As a result, personal problems, including mental illness, may be widespread among the homeless. On the other hand, being homeless may result in or intensify severe personal problems and behaviors that appear to be symptomatic of mental illness" (p. 114).

There are clearly many paths to homelessness. Even with longitudinal research methods (rarely used in homelessness research) it is unlikely that specific causal relationships between some structural or personal problems and homelessness will be definitively affirmed while others are ruled out, and this for everyone who is homeless.

The Elliot & Krivo (1991) conclusion appears to, at least in part, satisfy the desire to identify a cause and prevent homeless among those who may be at risk of becoming homeless. While we may not be able to do much to prevent or make another's personal disability go away (though in many cases, including HIV/AIDS, disability can be prevented), we <u>can</u> design and

administer structures that are sufficient to protect the most vulnerable from homelessness and other gross assaults on the quality of human life.

In light of research presented earlier on the disparity between affordable housing and low income earnings it appears that one way to prevent homelessness is to make housing affordable for people with disabilities (and other vulnerabilities such as unplanned unemployment). The "cause(s)" of homelessness are likely linked to, and fueled by the absence of just these kinds of preventative structures serving the most vulnerable.

IV. HIV/AIDS and Homelessness

There are no definitive statistics on the rate of HIV disease among homeless populations and little is known about the HIV rate among homeless populations in smaller, non-epicenter [8] communities. The same barriers to estimating the prevalence of HIV disease in the general public apply to the homeless population and are compounded by the dilemmas in enumerating the homeless. There are attempts to estimate the prevalence, however, among small samples of the homeless populations in epicenter communities, and those studies offer some startling results.

Reports of HIV rate among homeless populations have ranged from 5.5% in a study of 451 homeless people admitted to psychiatric hospitals in New York City–where the HIV infection rate among the general population is 2.9% (Cournos, et. al, 1991) to 45% in a study of men staying in a New York City shelter for the homeless (Torres, et al, 1990).

In another study conducted in New York City, researchers found a 19.4% HIV+ rate in a sample of male shelter residents who had severe mental illness but were not hospitalized (Susser, et. al., 1993)–a significantly higher rate than those found among hospitalized patients. An anonymous study of 162 patients of a clinic serving homeless people in San Francisco found a 21% HIV positive rate (Office of the Mayor of San Francisco, 1989). A 1990 study (National Institute on Drug Abuse, 1990) found that 10% of the people with AIDS who entered New York City hospitals were admitted homeless from the streets, 10% were admitted from shelters, and 20% of those

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[8] Epicenter cities include New York City, Miami, and San Francisco and others in which infection rates rose faster, earlier, and higher than in the rest of the country.

admitted indicated they had no permanent place of residence. And, in Miami, 9.8% to 14.3% of homeless people utilizing clinics were HIV positive (Greer, et. al., 1989).

The Ramifications of Homelessness for People with HIV Disease

Though the exact number of homeless people who are infected with the HIV virus is unknown and is unlikely to be known with any surety in the future an understanding of the impact of homelessness on those with vulnerable immune systems is evident. Brickner and Scanlon (1990) suggest that homelessness, even for the previously healthy, places people at increased risk for the full range of health problems.

> "The medical disorders of the homeless are all the ills to which flesh is heir, magnified by disordered living conditions, exposures to extremes of heat and cold, lack of protection from rain and snow, bizarre sleeping accommodations, and overcrowding in shelters" (p. 3).

Indeed, congregate shelters, while protecting residents from the elements and dangerous sleeping locations, can hardly be considered structures of preventative health care, especially for people with immuno-suppressant diseases. They can facilitate the spread of disease vectors such as tubercle bacillus, scabies, lice, and respiratory viruses. Additional physical deterioration common among homeless people–due to trauma, poor diet, hunger, exposure, drug and/or alcohol use, and the inability to stay clean–compound the body's vulnerability to infection, as do mental distress and stress (Brickner & Scanlon, 1990).

Fully 90% of AIDS-related deaths are due to opportunistic infections, especially pneumonia and tuberculosis (Centers for Disease Control and Prevention, 1986). Homeless people with HIV are far more susceptible to infection in shelters, other congregate settings, and on the streets than those who are living in stable housing (Raba, et al, 1990).

Homelessness and other unstable housing situations create barriers to accessing health care. (Elvy, 1985; Froner, 1988, Raba, et. al., 1990). In addition, mistrust of providers, fear of discrimination in shelters and other services to the homeless, suspicions regarding the medical profession's interest in "experimenting" on them, and lack of knowledge about the

latest treatments designed to diminish complications and extend healthy life all present barriers to accessing health care among homeless people (Raba, et al., 1990).

This holds special significance for an illness that requires intensive medical care at various times throughout its progression. The treatment of pneumonia, the most common opportunistic disease among people with HIV, for instance, requires bed rest, antipyretics, close supervision for adverse reactions to antibiotics, and occasionally oxygen and intravenous infusions. Because homeless people rarely have a place to rest all day, let alone the stable and sanitary conditions necessary to recuperate from pneumonia, they are usually hospitalized for treatment.

Tuberculosis, another common opportunistic disease, is especially prevalent among homeless people with HIV that has not progressed to AIDS. Overcrowding, poor ventilation systems, and communal sleeping arrangements in shelters place people with HIV disease at significantly increased risk of contracting, and spreading, tuberculosis. Treatment for tuberculosis is more complex than that for pneumonia. Non-compliance with treatment (aborted antibiotic treatment, for instance) is more likely and more dangerous (Raba, et al., 1990).

Homeless people with HIV tend to seek medical attention later in their illnesses. Preventive health care is rarely pursued and often not possible in light of more pressing issues such as accessing shelter, food, and clothing. These dynamics, coupled with aforementioned barriers to accessing and complying with medical care, create an environment that accelerates HIV-related illness among homeless people living with HIV/AIDS. They also create public health issues for the communities in which they live.

Human compassion for the homeless terminally ill may not be sufficient to move policy-makers to allocate adequate resources to house people living with HIV disease. However, the societal ramifications of having so many people infected with HIV disease living on the streets may add compelling evidence for support of that end. Information about the behaviors of homeless people should further illustrate that homelessness among people living with HIV/AIDS is clearly a public health issue.

HIV/AIDS Risk Behaviors Among Homeless People

The presence of behavioral problems correlated with poverty, particularly substance abuse, seems to further compound dilemmas faced by people living with HIV/AIDS, service providers who seek to meet their needs in the course of the illness, and the health of the larger community in general. In a randomized study of 848 single, heterosexual adults in San Francisco, Peterson et al, (1992) found that high levels of HIV risk behaviors were associated with low income. High risk behaviors included multiple sexual partners, not using condoms during sexual intercourse, and use of injection drugs.

Homelessness can, and apparently often does, compound high risk behaviors. Homeless people are likely to congregate in places where many people are HIV + so sexual partners are more likely to be HIV+. Increased drug and alcohol use among people who are homeless places people at further risk of HIV infection. Drug and alcohol use disinhibits sexual activity so safe sex practices become unlikely. People trade sex for drugs and money (or drugs, housing, food, etc.). They share needles and other "works". And since a range of basic needs are unmet homeless people are at risk of being coerced into high risk behaviors in exchange for the meeting of basic needs.

In a study of homeless African American men living in Miami, The Centers for Disease Control and Prevention (1991) reported that 11% of respondents identified as men who have sex with men. Thirty-nine percent of respondents reported having two or more sex partners in the previous month, only 49% of whom used condoms.

Similarly, a recent study found extremely high risk behaviors among a sample of homeless people in a Jackson, Mississippi [9], a non-epicenter community and relatively small urban setting (St. Lawrence & Brasfield, 1995). Twenty percent of respondents traded sex for money, 28% traded sex for drugs, 36% had sex with an anonymous partner. The mean number of sex partners was six (in a six month time period). Thirty-four percent of

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[9] The annual rate of reported AIDS cases in Mississippi was 16.4 per 100,000 in 1995; identical to that of Washington State.

respondents had been treated for at least one sexually transmitted disease (usually used as a surrogate marker for HIV infection) in the previous six months. In addition, 11% of respondents reported self-injection, with needle sharing, 41% reported using crack cocaine. Other research indicates a strong association between crack cocaine use and both multiple sex partners and the exchange of sex for money or drugs (Hudgins, et. al., 1995). Injection drug use is estimated to be up to 15 times higher among homeless people than among those who are stably housed (National Institute on Drug Abuse, 1990).

These findings have significant implications for the spread of HIV disease among the homeless population. In additional, new research is, not surprisingly, showing that many of these high risk behaviors are correlated with the expedited progression and increased complications of HIV/AIDS (Ronald, et. al., 1994). These in addition to what is known about the impact of homelessness upon health, especially for those with compromised immune systems lends compelling evidence for the need to provide safe, clean housing for people with AIDS.

Pathways to Homelessness Among People with HIV Disease

Among homeless people with HIV/AIDS as among others who are homeless, it is often not possible to determine if illness "causes" homelessness. However, in a 1986 study in New York City, Froner (1988) found that 50% of injection drug users and 31% of gay men who did not use intravenous drugs were homeless *within one year of diagnosis.* More recently, Crystal & Jackson (1989) found that in San Diego, California more than 30% of people with AIDS had lost their housing.

In a study of currently housed people with HIV in Cleveland, McDonell et al. (1993) found that those who had to move since learning of their HIV diagnosis did so because of declining health status, loss of income, or being asked to leave. This finding supports other research that suggests that housing loss may result from HIV infection (Crystal & Jackson, 1989; Froner, 1988).

In exploring the increasing homelessness among people with HIV disease, McDonell, et al., (1993) suggest eight factors, some of which distinguish homeless people with HIV/AIDS from the wider homeless population.

1. Loss of income.

2. Difficulty in obtaining an adequate income. Most people living with AIDS cannot hope to live on an income from the Social Security Administration without some types of additional income.

3. Discrimination or fear of contagion. Eviction of people living with HIV/AIDS, because of their status, is not uncommon.

4. Inability of care-givers to continue providing care. The specialty, detail, and amount of care needed for some people in the latter stages of the illness are formidable, particularly in families and communities with few resources.

5. Changes in health status that make current housing untenable. Accessibility issues, dependence issues, care needs, facility needs each become more salient as the disease progresses.

6. Increasing number of infections among the impoverished and already homeless.

7. Increasing prevalence of HIV among intravenous drug users, and other populations that are already homeless or at high risk of homelessness.

8. Growing prevalence among heterosexuals of color. In general, these communities are already vulnerable and have few material resources to stem the overwhelming tide of care needs related to HIV disease.

Honey (1988) offers additional suggestions regarding pathways to homelessness among HIV-infected people.

1.) The person may have been homeless prior to diagnosis. They may have been "crashing" with street friends, staying in "shooting galleries", etc. Or they may have been living in a city shelter, required hospitalization due to complications from HIV and subsequently barred from returning to the shelter due to HIV^+ status.

2.) Similarly, a family may refuse to allow an HIV+ person to return home. There may be a fear of catching the disease, protectiveness for small children, etc.

3.) Family may be unable to care for the person. Even with 24 hour home attendant service some families cannot shoulder the burden of intensive home health care for a loved one. Poor, ethnic minority families often live in substandard housing, and/or may not have space or the environment conducive to healthful lifestyles for people living with HIV.

4.) Landlord may evict tenants upon learning of HIV+ status. Similarly, a person hospitalized for several weeks may be unable to pay rent. If the HIV+ person lives in a room in someone's house (a common low-cost housing option) tenant rights protecting them from being evicted due to their disability do not apply.

The most conservative findings regarding the prevalence of HIV disease among homeless populations, the ramifications of homelessness for people with compromised immune systems, and the public health issues raised by the prevalence of HIV in homeless populations offer compelling reasons for the creations and support of programs and policies designed to stabilize housing for people with HIV/AIDS.

The State of AIDS Housing in the US Today

There are AIDS-specific housing opportunities in every state except Idaho, Montana, Wyoming, Nebraska, South Dakota, New Hampshire, and Vermont. In 1993 there were less than 425 AIDS housing providers providing approximately 7000 units of housing for people with HIV/AIDS. Today there are more than 700 providers and more than 10,000 units of housing for people living with HIV/AIDS. The 10,000+ figure does not include rental assistance. [10]

The federal commitment to housing for people with HIV/AIDS has increased significantly since 1992. The total funds available through the Housing Opportunities for People with AIDS (HOPWA) program in 1992 was 50 million. In

[10] All information about current AIDS housing provision is informed by a national HIV/AIDS Housing Provider Database administered by AIDS Housing of Washington.

1993 that doubled to 100 million and more than tripled to 156 million in 1994. In 1995 and 1996 total HOPWA funds have been 171 million dollars.

Housing for people with HIV/AIDS must, due to the progressive nature of the disease, serve a spectrum of needs over time. For instance, early in one's illness housing that allows for independent living is appropriate and adequate. As the disease progresses, added care services, such as on-site nursing care, may be necessary. Finally, for many people, residential hospice is the resource that allows them to die in a caring, dignified environment. Table 3 presents the current state of AIDS housing along the continuum of housing care. It shows that the majority of AIDS housing units are provided for permanent, unassisted living.

Table 3
Approximate Percentage of HIV/AIDS Housing Units In the US Along a Continuum of Housing Care

Type of AIDS Housing	Percentage of Total
Emergency Housing	7%
Transitional Housing	11%
Permanent Housing	54%
Assisted Living	14%
Skilled Nursing Facilities	8%
Hospice	6%

Major Public Funding Sources for AIDS Housing

Providers of AIDS housing typically combine a variety of public and private funding sources to create a spectrum of housing opportunities for people living with HIV disease. For instance in Seattle, AIDS Housing of Washington is currently developing a residential facility with related services for people living with HIV/AIDS and mental illness and/or drug addictions. Funding for this 64-bed facility is a package of funds from local corporations and businesses, service providers, local and national foundations, hundreds of individual and family donors, funds from state and local housing authorities, and a variety of programs of the federal Department of Housing and Urban Development.

The largest portions of money funding housing for people with HIV/AIDS across the US are federal dollars. The two major federal funding sources are described here.

HOPWA

The US Department of Housing and Urban Development (HUD) sponsors a program that provides funding specifically for AIDS housing. The Housing Opportunities for Persons with AIDS (HOPWA) provides funds for housing assistance and related services to low income people who have HIV disease. Funds are allocated in two ways.

First, states and metropolitan areas with the largest number of cases and incident rates are awarded monies on a formula basis. The formula utilizes CDC epidemiological data. It requires that areas have at least 1,500 reported cases of AIDS and that metropolitan areas have populations greater than 500,000 people. Currently 49 metropolitan areas and 27 states with areas outside of metropolitan areas are receiving HOPWA funds. Washington State receives HOPWA funds in both of those categories: The Seattle metropolitan area receives HOPWA funds and Washington State receives HOPWA funds to serve people with HIV disease living outside of the Seattle metropolitan area.

Second, competitive grants are awarded through a smaller funding stream in the HOPWA program to communities that target people with HIV/AIDS and have been diagnosed with a severe mental illness and/or a substance abuse problem. Another funding stream targets model and innovative programs with potential for replication. Communities outside of communities that are eligible for funds through the formula process can apply for funds in this category as well.

HOPWA funds can be utilized to support a spectrum of housing and related services. They can be used to purchase, build, or rehabilitate buildings for housing, fund operations of facilities, provide rental assistance vouchers, and emergency financial assistance to prevent homelessness. HOPWA funds can also support related social services such as health and mental health care, treatment programs, case management, and assisted living services.

Funds from other HUD programs are regularly utilized by AIDS housing providers as well. Some of these programs include Community Development Block Grants (earmarked to promote community development for low to middle income people), Shelter Plus Care (providing rental assistance in combination with support services to homeless people with disabilities), federal surplus property (often now comprised of closed military facilities), the Emergency Shelter Grants Program (providing funds for shelters and supportive services), the Supportive Housing Program (designed to promote housing that facilitates the transition from homelessness to independent living), and the HOME Program (funding the development of housing opportunities for low and very low income families).

The Ryan White CARE Act

The Ryan White Comprehensive AIDS Resource Emergency Act was passed in 1990 and has authorized approximately $900 million dollars to assist people with HIV/AIDS each year since. These funds, administered through the Health Resources and Services Administration (HRSA) are awarded through a formula *similar* to that described above. Areas with the greatest number and incidence of reported AIDS cases receive the greatest proportion of funds. These funds can be used to provide a variety of care services including primary medical care (comprising slightly more than half of the expenditures), support services (such as case management and mental health care), volunteer training and transportation, nutritional services, and housing assistance (including emergency, transitional, and permanent housing).

Ryan White funds are awarded to local communities in blocks. Community planning commissions then determine spending priorities. Subsequently, the amount of money contributed to housing differs by community. Overall, however, in its first two years, approximately 5% of Ryan White funds were used for housing (O'Connell, 1992).

The Housing Needs of People with HIV/AIDS Persist

Currently there are approximately 200,000 people living with AIDS in the US. AIDS Housing of Washington estimates that 30-50% of these people require

some form of housing assistance in the progress of their illness. Subsequently, 60,000 to 100,000 units of rental subsidies are needed now. This indicates that there is currently approximately one unit of AIDS-dedicated housing for every 6 to 10 people in need [11] (Lieberman, 1996).

HIV infection is spreading deeper into low income communities; communities already struggling to secure affordable housing. As low income people with HIV/AIDS lose stable housing their health becomes compromised and in some cases the health of the wider community is endangered. As public and private funds are made available for housing low income people with HIV/AIDS, housing planners can be guided by information on the demographics, needs, and preferences of possible clients. The remainder of this study provides this kind of information from a large, diverse sample of people living with HIV disease.

[11] Because the number of people with HIV/AIDS who are receiving rental assistance is unknown this estimate of people still in need can only be an approximation.

Chapter 3
Methodology

This section describes the data set used in the dissertation. It presents information on the sampling approaches taken in each of the six communities represented in the data set. The implications of the differential sampling methods and of the differential locales are explored. Finally, an overview of the analyses used with the data set is presented.

The Sample Data Set

The data set used in this dissertation is a combination of six smaller data sets originally used as needs assessment data from six communities in the United States. Each of these smaller needs assessment data sets was created through the use of a paper and pencil questionnaire distributed to people living with HIV disease. The findings were used in local communities to assist in the development of housing opportunities for people infected with the disease. The six communities are:

- Phoenix, Arizona
- Chicago, Illinois
- Alameda County, California (including Oakland and Berkeley)
- Contra Costa County (located directly north and east of Alameda County)
- San Bernardino and Riverside Counties (in southwest California)
- Washington State (with the exception of King (greater Seattle area) and Snohomish (Everett and its largely rural and suburban surrounding area) Counties).

Assisted by the Seattle-based AIDS Housing of Washington, a technical assistance provider to communities developing housing plans for people living with HIV disease, each community conducted a housing needs assessment among the infected community. These assessments were designed to produce a greater understanding of the local needs of those most likely to utilize public housing resources as well as their preferences for housing location, amenities, and related services.

The data set contains a total of 2864 cases. Table 4 shows the number of cases contributed by each community as well as each communities proportional contribution to the dissertation data set.

Table 4
Number of Cases and Percentage of Data Set Contributed by Each Community

Community	Number of Cases	Percentage of the Data Set
Chicago	825	29%
Alameda County	617	21%
Riverside & San Bernardino Counties	539	19%
Phoenix	429	15%
Washington	366	13%
Contra Costa County	88	3%
TOTAL	**2864**	**100%**

As discussed in greater detail below, each community used a slightly different version of the questionnaire in its needs assessment, which resulted in some variations in data collected and in considerable missing data on some variables. For instance, in Phoenix respondents were not asked if they had ever been homeless in the past–a significant variable in this dissertation. Consequently, only 85% of the sample is included in analyses of relationships among previous homelessness and other variables.

The Questionnaire

The questionnaire used for each of the needs assessments (which occurred subsequent to each other rather than simultaneous with each other) except that done in Phoenix (see the next section) was refined after each administration. Chicago was the first community to be surveyed,

followed by Washington State, Alameda County, Phoenix, Contra Costa County, and San Bernardino/Riverside. A copy of the Alameda County questionnaire is presented in Appendix A. Each iteration of the questionnaire contains approximately 50 questions. All but 2 or 3 of the questions had a multiple response format. The 2 or 3 open-ended questions usually asked about preferred location (town, neighborhood, etc.) and invited additional comments at the end of the questionnaire. Respondents answered by writing directly on the questionnaire.

Sampling Approaches

Survey approaches in each community differed slightly. While all communities sought to gather information from people most likely to access public housing resources (and other publicly-funded services) they did not follow an identical sampling scheme as would be ideal for a multi-community study. The area in which they differed most significantly is that of outreach to homeless people. In some of the communities resources were directed toward collecting data from currently homeless people. For instance, in Chicago and Alameda Counties members of the infected community were hired to conduct targeted outreach among infected people living on the streets. In others, such as Washington State, no such efforts were made. The differing percentages of homeless people across locales in the data set may in fact represent these sampling differences more than actual number of homeless people in the communities.

Specific Methodologies by Community

Each locale's methodological approach to their needs assessment is presented below. Three communities conducted only housing needs assessments. The other three incorporated housing questions into more comprehensive AIDS services needs assessments. In order to access federal monies through the Ryan White Care Act, communities are required to conduct needs assessments among their citizens living with HIV. It is these needs assessments in which housing-related questions were included in Phoenix, Washington, and Contra Costa County.

In all communities questionnaires were completely anonymous. No names or identifying information were attached to questionnaires. In no

community were respondents paid for completing questionnaires. Outreach workers/surveyors, when they were utilized, were paid $10.00 for every completed questionnaire they returned to the local agency administering the survey.

Chicago

The AIDS Foundation of Chicago served as the sponsoring agency for the survey conducted in Chicago. Questionnaires, including a Spanish translation, were distributed through HIV/AIDS case managers and other providers specifically serving persons with HIV/AIDS. Special efforts were made to increase the response rate among homeless people with HIV/AIDS and people who may not have a case manager. To do this, members of the infected community familiar with street living were hired to administer the questionnaire on the streets. Unfortunately, questionnaires administered in this way were not discernible from those administered through HIV/AIDS care providers. As a result it is impossible to know what percentage of the respondents completed the questionnaire in this fashion.

Anonymous questionnaire data were entered into an SPSS Data Entry file by a data entry professional contracted by AIDS Housing of Washington. This file contained a total of 828 cases, three of which were deleted prior to inclusion in the sample data set because the majority of relevant variables contained missing data.

Alameda County

The survey conducted in this large county on the eastside of the San Francisco Bay (including Oakland and Berkeley) was overseen by Alameda County Housing and Community Development. Questionnaires, including a Spanish translation, were distributed through HIV/AIDS case managers, and staff members from a variety of AIDS service organizations. The majority of respondents were recruited by outreach surveyors, many of whom were members of the infected community and the communities in which they were surveying (injection drug users, sex traders, homeless people, persons of color, low-income, and non-English-speaking communities).

Anonymous questionnaire data were entered into an SPSS Data Entry file by a data entry professional contracted by AIDS Housing of Washington. That file contained 617 cases, all of which were included in the sample data set.

Contra Costa County

The Contra Costa Health Service Department Public Health Division conducted the needs assessment in this county east and north of Alameda County. The housing needs assessment was included in a wider HIV services needs assessment. Questions added to this wider survey were taken from previous AIDS Housing of Washington questionnaires. The survey was distributed to service agencies, providers related to county programs (e.g. case managers), hospitals, and to members of the local HIV Interagency Service Providers' Network. Outreach workers collected data from individuals not accessing public services. Over 700 surveys were distributed though only 90 were returned, causing additional concern about the representativeness of the data for this community.

Questionnaire data were entered in Contra Costa County by Health Services Department staff using EpiData, a statistical package used by epidemiologists. Data were subsequently translated into an SPSS system file. Of the 90 cases entered into the Contra Costa data set, two were not included in the current data set due to an unacceptably high percentage of missing data.

Riverside/San Bernardino Counties

Two of the largest counties in the United States, comprising more land than some US states, Riverside and San Bernardino (major towns include Riverside, San Bernardino, Palm Springs, and Palm Dessert) posed surveying challenges not found in densely populated urban areas. The majority of survey respondents were recruited through mail, in clinics, and (particularly in the cities of Riverside and San Bernardino) by outreach workers/surveyors hired for this purpose. Two community-based AIDS service organizations, the Inland AIDS Project and the Desert AIDS Project, facilitated the survey process. A Spanish language version of the AIDS Housing survey was made available to respondents.

Questionnaire data were entered into an SPSS Data Entry file by a data entry professional contracted by AIDS Housing of Washington. The file contained 539 cases, all of which were included in the sample data set.

Washington State

Data were collected in all but King and Snohomish Counties in Washington as part of a wider needs assessment co-sponsored by The Washington Department of Public Health and AIDS Housing of Washington. The needs assessment covered an extensive range of care-related needs, including housing. Nearly half of the questions were related to housing and these questions closely match those in other AIDS Housing questionnaires. The needs assessment was conducted by an independent health consulting firm, Peterman and Associates.

Questionnaires, including a Spanish translation, were distributed around the state through HIV/AIDS case managers, their staff, and other providers serving persons with HIV/AIDS. In some areas, questionnaires and self-addressed return envelopes were mailed out to individuals who were receiving case management services. In other settings, case managers distributed questionnaires to their clients when they came in for services. Respondents were given the option of returning their questionnaire to the local site from which they received their questionnaire or to an anonymous site. There were no efforts to increase response rates among homeless people.

Questionnaire data were entered into an SPSS Data Entry file by a data entry professional contracted by the contractor for the wider Washington AIDS Care Survey.

Phoenix and Surrounding Counties

In the Phoenix area, as in Washington State, housing-related questions were included in the wider AIDS care needs assessment mandated under the Ryan White Care Act. The survey was sponsored by the Maricopa County Community AIDS Partnership and conducted by an independent research contractor, Behavior Research Center.

Surveys were distributed throughout Maricopa (Phoenix), Gila, and Pinal Counties to doctors, AIDS service organizations, clinics and HIV/AIDS support groups. In addition, the research staff completed several on-site survey interviews (verbal administration of the questionnaire) in clinics that serve HIV positive people.

Questionnaire data were entered in Phoenix by the independent contractor who conducted the wider needs assessment survey. The statistical package used was ABTAB. Data were translated into an SPSS system file. There were 429 cases entered, all of which were included in the current data set.

Limitations of the Data Set

There are significant limitations inherent in the data set that delimit its use as a representative sample of people living with HIV disease who are in need of housing. Foremost, of course, is the absence of a random sampling approach in recruiting survey respondents. In each of the six locales represented in the data set, a convenience sample was collected in order to assess the demography of, and the needs most prevalent among probable housing clients. This renders inference to the wider population of low income people with HIV/AIDS impossible.

Regional Differences and Missing Regions

Though each of the locales represented in the data set shares some similar methodological approaches to sampling, the differences across locales pose problems. These problems are particularly salient for analysis across locales.

For example, one locale made no attempts to gather data specifically from homeless people. This does not mean there are no homeless people in the data set from that locale, only that no specific outreach efforts were made. Keeping in mind the demographic trends of the homeless population, this likely skews the data. Given that people of color are more likely to be homeless than are white people, even in communities with very few people of color (Shlay and Rossi, 1992), or that hard drug use is much higher among homeless respondents than among those who are currently housed (see the Findings Section), differential sampling of homeless people

has an impact on the ability of the sample to represent the local community from which it was gathered and, of greater importance to this project, limits cross-locale comparisons in this data set.

Several regions of the United States are missing. There is no representation in the data set of northeast [12] communities. This is particularly unfortunate since it is the geographical area in which the majority of HIV/AIDS cases have been reported in the US. Similarly, there are no communities from the south [13], where the largest proportionate increase of reported cases in the US is occurring (Centers for Disease Control, 1995).

Dilemmas in Surveys That Include Homeless People

This sample exemplifies many of the dilemmas in research with people who are homeless. Mistrust of surveyors, purposive isolation, issues of literacy, mental illness, drug use, and the invisibility of many homeless people all pose barriers to gathering data from people who are homeless. In these local needs assessments, as in all surveys involving homeless people, homeless people living with HIV/AIDS are surely underrepresented (Wright and Devine, 1995). While the data set may offer important information about the housing and related needs that many currently homeless people might have, it cannot be used to estimate the percentage of the people living with HIV/AIDS who are homeless, nor the percentage of people who are homeless that are living with HIV/AIDS.

Even in light of these limitations, however, given the size of the sample, the diversity of locales and respondents, and the sample's demographic similarity to national epidemiological data (see Findings Section) the data may be instructional as an *exemplar* of AIDS housing clientele and their needs. It may be particularly useful for program planners, housing advocates, and housing policy-makers as an approximation of the types of needs which may arise among infected communities across the county.

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[12] The CDC considers northeastern states to be Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.
[13] The CDC considers southern states to include Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Data Analysis

Data analysis included two general approaches. One was descriptive in nature. The other was multivariate and predictive.

Descriptive Analyses

The descriptive analyses focused on three general areas. First, analysis to assist in understanding the similarity between the sample data set and the larger epidemiological profile of the infected community in the US was conducted. Second, several demographic and behavioral characteristics were examined and presented. Third, respondents' housing preferences were analyzed across a number of these demographic and behavioral characteristics. Each of these three areas is described at greater length below.

Comparison Analysis

To asses the degree to which the sample might represent the national epidemiological profile of people with AIDS and HIV, a comparison of the data set respondents who have AIDS diagnoses was made with US epidemologic data of all known cases of AIDS available from Centers for Disease Control and Prevention. A similar comparison of data set respondents who are HIV positive with a subsample of people living with HIV in the US was made as well. The details and limitations of these analyses are discussed in the Findings Section.

Demographic and Behavioral Description

Subsequent descriptive data analyses were guided by an interest in understanding several demographic and behavioral characteristics of people with HIV disease who might be most likely to need housing assistance. These descriptive analyses include examination of demographic characteristics such as ethnicity, gender, income, and age, as well as behavioral characteristics such as substance use and previous incarceration.

Analysis of Housing Preferences

Respondents' housing preferences were analyzed and are included in the dissertation. Understanding respondents' housing preferences is important due to the considerable heterogeneity of the community of people living with HIV disease and the importance of developing housing that is consistently and fully utilized by those for whom it is designed. Awareness of the differing housing needs and preferences across the community of people with AIDS and the development of the housing commensurate with them assures high utilization and increases the likelihood of effectiveness. For instance, housing needs and preferences are quite different across the progression of HIV disease (asymptomatic to full blown AIDS), for single adults versus families with children, for people actively using hard drugs versus those who are clean and sober. Incorporation of this data in housing development is an important, though often overlooked, element in AIDS housing and other public housing efforts (Sawyer, 1993).

Respondents were asked a number of questions about their housing preferences. There were three general areas of housing preference questions. 1.) All respondents were asked if they would favor housing in which people across the HIV disease continuum live together; 2.) differing slightly by locale, respondents were presented with a number of dyadic housing options and asked to pick the preferred option; and, 3.) differing significantly by locale, respondents were asked to rate or rank several different amenities that might be included in housing (such as clean and sober housing options, disability-accessible options, etc.) or might be located near housing (such as medical care, day care, or shopping). This dissertation reports findings on respondents' preferences regarding housing inclusive of all serostatus' and the dyadic preferences. The rating and ranking schemes of the amenity/location preferences differed across locales to the degree that aggregate analysis is impossible. Analysis by locale has been conducted previously and is currently informing local housing planning in each of the locales represented in this study.

Descriptive demographic, behavioral, and consumer preference information can be used to plan appropriate housing and related services

locally as well as inform policy-makers. It increases knowledge about the trends in the disease and the general needs and preferences that low-income people with HIV disease are likely to bring with them to a housing setting. Policy and services based on them is likely to enjoy high utilization and effective implementation.

Multivariate Analyses

In a era of limited public resources for housing assistance the imperative to assure housing for those who are at greatest risk of homelessness guides much of the housing planning in the AIDS care arena. In light of this, the dissertation seeks to identify the correlates of homelessness, in order to understand who might be at greatest risk of homeless. Toward this purpose, logistic regression techniques are used to identify these correlates and to begin the development of a risk-of-homelessness spectrum.

Regression techniques are utilized in order to understand the impact of each independent variable on the outcome or dependent variable while holding all other independent variable constant. These techniques can identify the best fitting, most parsimonious, and feasible, model to describe the relationship between a set of independent variables and a dependent variable (Hosmer & Lemeshow, 1989; Norusis, 1991). For instance, this study will seek to identify the best explanatory model comprised of the independent variables discussed below and their relationship with the dependent variable. It could offer insight into the relationship between gender, ethnicity, income—all independent variables—and homelessness—the dependent variable—in the lives of the sample data set respondents. It may show that all of the independent variables contribute equally to predicting homelessness among respondents. Or it may indicate that if income and race/ethnicity are held constant across genders, gender actually contributes nothing to predicting homelessness among respondents.

Logistic regression techniques, as opposed to the more regularly used linear regression techniques, are necessary in this study because the outcome/dependent variable, "current housing situation" (described below) is dichotomous (Hosmer & Lemeshow, 1989; Norusis, 1991). Respondents are either "currently homeless" or "currently housed". Linear

regression techniques require the dependent variable to be continuous in nature.

Because of this the interpretation of findings are different as well. Whereas a linear regression analysis would allow us to understand the amount of change in the (continuous) dependent variable for every unit of change in the independent variable, logistic regression renders an estimate of the *probability* of an outcome–in this case, homelessness– occurring with every unit of change in the independent variable. The logistic regression coefficient always lies between 0 and 1.

In this study, for instance, logistic regression will examine any increase in the probability of homelessness as respondents' monthly incomes change from one ordinal category to another. Previous research indicates that as income drops, the probability of homelessness increases (Shlay and Rossi, 1993). Logistic regression analysis in this study will either support or refute these findings about homelessness and income as well as investigate the relationship of other independent variables to the dependent variable, while controlling for the influence of all other independent variables.

The Dependent Variable

In preparation for multivariate analyses, a new variable was computed that divided the data set into two groups of respondents: those who are currently homeless (n=235) and those who are currently housed (n=2473)[14]. In order to be considered "currently homeless", respondents had to have indicated living on the street, in an abandoned building or car, in a shelter or transitional housing facility, or in a hotel/motel.

This is a relatively conservative, *literal* definition of the respondents who may have been homeless at the time of the survey. There may, in fact, have been some respondents who were homeless but are not included as such for this study. For instance, several respondents indicated they were living with a friends or family. In light of the earlier discussion of literature defining homelessness, some of these respondents may, in fact, have been "crashing" at the home of friends and family in absence of having their own home in which to stay. The data, however, does not distinguish the

[14] There is missing data on current housing situation for 148 respondents.

respondents who are living with friends or family and maintaining a home with them from those who are "crashing" at the home of a friend/family member in a time of crisis. Given the lack of clarity in regard to the status of these respondents, only those respondents who are *literally* homeless are considered "currently homeless" in this study.

In light of this, the number of homeless respondents in the sample data set may be underestimated. In addition, this may diminish the ability of logistic regression models to accurately predict those respondents who are homeless from those who are housed. In future research of this kind, a more specific definition of respondents' current living situation may address these deficits.

The Independent Variables

Eleven independent variables of salience in previous research on homelessness are included in the analyses. Each is described here.

- **Race/Ethnicity**

  As presented in descriptive analysis, race/ethnicity is arranged into seven categories. These are

African American	Native American/Native Aleutian
Asian/Pacific Islander	White
Latina/Latino	Other

  Mixed Race (respondents who identify with more than one group)

  For multivariate analysis this variable was recoded into two values: People of color and white people.

- **Gender**

  Respondents could indicate if they are male, female, or transgender. For most analyses only those respondents who are either female or male are included.

- **Age**

  Age of respondents is calculated by subtracting the year of birth from the year of survey–1995.

- **HIV Status**

  All respondents have HIV disease and represent its full spectrum of progression. On the survey they were asked to indicate if they were HIV positive with no symptoms, HIV positive with symptoms, or living with an AIDS diagnosis.

- **Income**

  The income variable has been recoded to equilibrate differences across locales' questionnaires. Monthly income data were collected in three different categorical arrangements. In four of the communities all the categories were identical. In both of the remaining two, categories were different from all the others. To address this dilemma the following strategy was implemented.

  First the midpoint of all ranges in all three different styles was calculated as follows:

Style 1	$400	$625	$875	$1250	$1750	$2250	
	^	^	^	^	^	^	
<$300	$300-500	$501-750	$751-1000	$1001-1500	$1500-2000	$2000-2500	>$2500
Style 2		$667	$1250	$1750			
		^	^	^			
	<$500	$500-833	$834-1250	$1250-2083	$>2083		
Style 3	$599	$825	$1025	$1225	$1525	$2375	
	^	^	^	^	^	^	
<$446	$447-750	$751-900	$901-1150	$1151-1300	$1301-1750	$1751-3000	>$3000

Second, new ranges were constructed from those midpoints that fell into similar ranges, as follows:

1. A category of all respondents making less than or equal to $500;
2. A category of respondents making, on average, $599 through $667;
3. A category of respondents making, on average, $825 through $1025;
4. A category of respondents making, on average, $1225 through $1750; and
5. A category of respondents making, on average, over $2000 as represented in the array below.

Style 1	$400	**$625**	$875	**$1250**	**$1750**	$2250	
<$300	$300-500	**$501-750**	$751-1000	**$1001-1500**	**$1500-2000**	$2000-2500	>$2500
Style 2		**$667**		**$1250**	**$1750**		
	<$500	**$500-833**		**$834-1250**	**$1250-2083**	$>2083	
Style 3	**$599**	$825	$1025	**$1225**	**$1525**	$2375	
<$446	**$447-750**	$751-900	$901-1150	**$1151-1300**	**$1301-1750**	$1751-3000	>$3000

There are five levels of the income variable. It describes respondents' average monthly income.

- **Sexual Orientation**

  Respondents were asked which of these four options best describes them: a man who has sex only with other men, a woman who has sex only with other women, a man or woman who has sex with either men or women, or a man or women who has sex only with someone of the opposite gender. These were coded as MSM (men who have sex with men), lesbian, bisexual, and heterosexual respectively.

- **History of Homelessness**

  Respondents were asked if they had ever been homeless. No

definition of homelessness was provided on the questionnaire. The response was dichotomous. Respondents in all locales except Phoenix were asked this question.

- **Presence of Children**

  Respondents were asked to indicate the ages of their children with whom they live. For analyses, a new variable was computed to indicate those respondents who lived with children under the age of 18 years old.

- **Household Composition**

  The survey asked respondents to indicate the make-up of their current households. They could report living alone, living with a partner, living with their children, living with their partner and their children, living with family, living with friends/roommates, living with other non-related adults, or living in some other configuration. In addition, for some analyses a new variable was computed that dichotomized the sample between those who live alone and those who live with others.

- **Drug Use**

  Respondents were asked if they use any of the following substances.

Alcohol	Cocaine
Marijuana	Crack
Heroin	

  Except for respondents living in Phoenix , they were not asked about frequency or quantity of use.

- **History of Incarceration**

  Respondents in two communities–Chicago and Riverside/San Bernardino–were asked if they had ever been in jail. The response was dichotomous and no categorization of crime (i.e., felony, misdemeanor, etc.) was included.

Inclusion of Variables by Locale

Since there was some discrepancy across communities in questionnaire design it is important to understand which communities are included in analyses conducted in the dissertation research. Table 5 shows the key

independent variables used in the data analysis and the community questionnaires in which each was included. All communities asked respondents about their current housing situation (dependent variable).

Table 5
Independent Variables and the Community Data Sets in Which Each is Included

Variable	Chicago	Alameda	Washington	Contra Costa	Riverside/San Bernardino	Phoenix
Ethnicity	√	√	√	√	√	√
Gender	√	√	√	√	√	√
Age	√	√	√	√	√	√
HIV Status	√	√	√	√	√	√
Income	√	√	√	√	√	√
Sexual Orientation	√	√		√	√	
Previously Homeless	√	√	√	√	√	
Kids in the Home	√	√		√	√	√
Household composition	√	√	√	√	√	√
Drug Use	√	√	√	√	√	√
Incarceration	√				√	

The Findings chapter presents an overview of the demography of each local sample to further detail the heterogeneity across samples. In the reporting of analysis the total number of cases included is always reported.

Chapter 4
Research Findings

Introduction

This chapter presents four areas of findings from the sample data set. First, in an effort to understand the degree to which the sample data set may represent the demographics of the population of Americans with HIV/AIDS, it is compared to epidemiological data available from the Centers for Disease Control and Prevention.

Second, descriptive data about the sample data set are presented. In this section, a description of the sample data set respondents who are currently homeless is presented as well and that subsample is compared to the larger "housed" subsample on the independent variables described in the Methodology Chapter.

Third, the results of multivariate analyses designed to identify the most salient risk factors for homelessness among respondents is presented. The construction of a homelessness risk spectrum utilizing these risk factors is presented. Characteristics of people at low, moderate, and high risks of homelessness are discussed.

Finally, findings from questions about respondents' housing preferences are presented. These are examined by a number of demographic variables, in an effort to identify any differences across groups in housing preferences.

Comparison of the Data Set to the US Epidemiological Profile of People with HIV Disease

Table 6a shows information currently available describing the national demographic profile of people living with AIDS as of December 31, 1995 (Centers for Disease Control, 1996). These demographics are compared to the demographics of only those respondents who indicated having an AIDS diagnosis. Any differences between the sample data set respondents and the national profile are presented in Table 6a as well.

Table 6a
Comparison of CDC Surveillance Data for People with an AIDS Diagnosis to Sample Data Set Respondents with an AIDS Diagnosis

Demographic	CDC Surveillance Data n=506,538	Sample Data Set n=995	Difference
Race/Ethnicity			Whites, Asian/ Pacific Islanders, and Native American/ Alaskans with an AIDS diagnosis are over represented in the sample data set. African Americans and Latino/as are underrepresented
% African American	34.02%	21.5%	
% White	47.34%	56.6%	
% Latina/o	17.53%	13.1%	
% Asian/Pac.Islander	< 1.0%	1.7%	
% Native American/Alaskan	< 1.0%	2.6% *	
Gender			Women are slightly over represented in the sample data set
% Male	85.83%	82.8%	
% Female	14.17%	17.2%	
Gender and Race/Ethnicity			African American and Latino males with an AIDS diagnosis are underrepresented in sample data set. White women with an AIDS diagnosis are over represented and African American women are slightly underrepresented. Sample data set percentages do not sum to 100 due to missing data and two additional race/ethnicity groups not in CDC data (mixed race and "other").
Males			
% African American	25.9%	15.4%	
% White	44.3%	50.3%	
% Latina/o	14.5%	10.1%	
% Asian/Pac.Islander	< 1.0%	1.4%	
% Native American/Alaskan	< 1.0%	2.1%	
Females			
% African American	7.7%	6.2%	
% White	3.4%	6.4%	
% Latina/o	2.9%	2.9%	
% Asian/Pac.Islander	< 1.0%	< 1.0%	
% Native American/Alaskan	< 1.0%	< 1.0% *	
Exposure Category			Caution! Sample data set has exposure data on few respondents (n=383) & categories do not well match those of CDC.
% Needle	25%	15%	
% MSM	58%	69%	
% Heterosexual sex	8%	17%	
% Blood-related	2%	7%	
Age at AIDS diagnosis			More caution is recommended! The sample data includes only 361 cases of people with AIDS on whom both age and year of diagnosis data are available. This data does show a good match between the two data sets
% under 20	1%	2%	
% 20-24	4%	5%	
% 25-29	14%	14%	
% 30-34	23%	18%	
% 35-39	22%	21%	
% 40-44	16%	23%	
% 45-49	9%	10%	
% 50-54	5%	5%	
% 55-59	3%	1%	
% 60-64	2%	< 1%	
% over 64	1%	< 1% *	

* Percentages do not add to 100 due to missing data and/or additional categories in sample data set in CDC demographics.

Only 26 states currently report HIV occurrences among adults. Of the states represented in the dissertation data set, only Arizona reports HIV prevalence. Table 6b shows the aggregate data from all 26 states reporting to the CDC and similar demographic data from respondents in the dissertation data set who are HIV+ and do not have an AIDS diagnosis.

There are several problems with the CDC HIV+ data. First, they, unlike the CDC AIDS data, are not representative of all people who are HIV+. Some reporting states offer anonymous testing while others offer only confidential testing, a distinction that surely differentiates patterns of those who seek testing. In addition, many states conduct targeted testing outreach so those tested do not represent all populations who may be HIV+. In some states testing is easily accessed, in others it is more difficult to access. Perhaps most significant is the differential dates at which states began collecting HIV+ rates among those tested. Since the data is cumulative, residents of states that have been collecting data for a longer period of time are over represented in the data.

The comparison is presented with the caveat that it is a comparison of one convenience sample to another convenience sample. This makes it difficult to interpret the relevance of differences between the two data sets.

Table 6b
Comparison of CDC Surveillance Data for HIV+ People in 26 States with NO AIDS Diagnosis to Sample Data Set Respondents with NO AIDS Diagnosis

Demographic	CDC Surveillance Data n=75,936	Sample Data Set n=1,791	Difference
Race/Ethnicity			Native American/ Alaskans and Latino/as who are HIV+ are over represented in the sample data set. African Americans who are HIV+ are underrepresented
% African American	50.7%	36.7%	
% White	40.1%	40.5%	
% Latina/o	5.8%	15.1%	
% Asian/Pac.Islander	< 1.0%	1.1%	
% Native American/Alaskan	< 1.0%	2.4% *	
Gender			Women who are HIV+ are slightly over represented in the sample data set
% Male	76.5%	74.5%	
% Female	23.5%	25.5%	
Gender and Race/Ethnicity			African American males who are HIV+ are underrepresented in sample data set. Latino men who are HIV+ are over represented in the data set. The same pattern is the case for women Sample data set percentages do not sum to 100 due to missing data and two additional race/ethnicity groups not in CDC data (mixed race and "other").
Males			
% African American	35.0%	24.0%	
% White	34.2%	33.5%	
% Latina/o	4.4%	11.3%	
% Asian/Pac.Islander	< 1.0%	< 1.0%	
% Native American/Alaskan	< 1.0%	1.8%	
Females			
% African American	15.6%	12.7%	
% White	6.0%	7.0%	
% Latina/o	1.0%	3.8%	
% Asian/Pac.Islander	< 1.0%	< 1.0%	
% Native American/Alaskan	< 1.0%	< 1.0% *	
Exposure Category			Caution! Sample data set has exposure data on few respondents (n=632) & categories do not well match those of CDC.
% Needle	18%	15%	
% MSM	51%	71%	
% Heterosexual sex	12%	20%	
% Blood-related	1%	4%	
Age at AIDS diagnosis			More caution is recommended! The sample data includes only 627 cases of people who are HIV+ on whom both age and year of diagnosis data are available. This data show that respondents in the sample data set may be slightly older, on average, than people who are HIV+ in the CDC data.
% under 20	4%	3%	
% 20-24	15%	12%	
% 25-29	23%	21%	
% 30-34	23%	21%	
% 35-39	17%	18%	
% 40-44	9%	13%	
% 45-49	4%	7%	
% 50-54	2%	4%	
% 55-59	1%	1%	
% 60-64	< 1%	< 1%	
% over 64	< 1%	0% *	

* Percentages do not add to 100 due to missing data and/or additional categories in sample data set in CDC demographics.

While the sample data set appears to reflect the larger national profile of people living with HIV/AIDS on many variables, there is clearly an under-representation of African American respondents. This is likely due to the high representation in the sample data set of communities in the western United States (all but the Chicago respondents live in western states). The CDC reports that the percentage of people with AIDS who are African Americans is lowest in the western states (Centers for Disease Control and Prevention, 1995). This also likely reflects the smaller representation of African Americans and larger representation of Latino/as, Asians, and Native Americans in the general population in western states. According to the 1990 census, while 56% of Asian Americans, 48% of Native American/Alaskans, 45% of Hispanics, and 20% of white Americans live in the western US, only 9% of African Americans live in the western US (The Reference Press, 1996).

Descriptive Analysis of Sample Data Set Respondents

This section presents a demographic overview of the sample and focuses on the salient characteristics represented by the independent variables presented in the Methodology Chapter. Briefly, demographic data illustrate that men in the sample are as likely to be white as men of color, but women of color are over-represented in the sample, as they are in the infected community. Women, especially women of color, are more likely to be impoverished than the men in the sample, especially the white male respondents. Sample distributions also show that women in the sample data set, especially women of color, are more likely to be raising minor children than are men, and are significantly more likely to use hard drugs than are the men in the sample data set. Regardless of color, women in the sample data set are much more likely than women in the general population to have been incarcerated at some time in their lives. There are a total 2,856 respondents in the sample data set. Each of these demographic variables will be discussed at greater length in the following sections.

Race/Ethnicity

Table 7 and Figure 6 show the race/ethnic identity of sample data set respondents. People identified here and elsewhere in the dissertation as *multi-racial* or *mixed race* are respondents who checked more than one race/ethnic identity. The terms *Latina/Latino* and *Hispanic* are used interchangeably throughout the dissertation and refer to the same subsample in the sample data set. Race/ethnicity information is missing on 25 respondents. The race/ethnicity of the sample by locale is shown in Table 8a below in the section describing the gender/ethnicity of the sample data set respondents.

Table 7
Number of Respondents in Each Race/Ethnic Group

Race/Ethnic Group	Number of Respondents
African American	889
Asian/Pacific Islander	36
Latino/Latina	418
Native American	70
White	1297
Multi-racial	94
Other	27
Missing	25
Total	**2856**

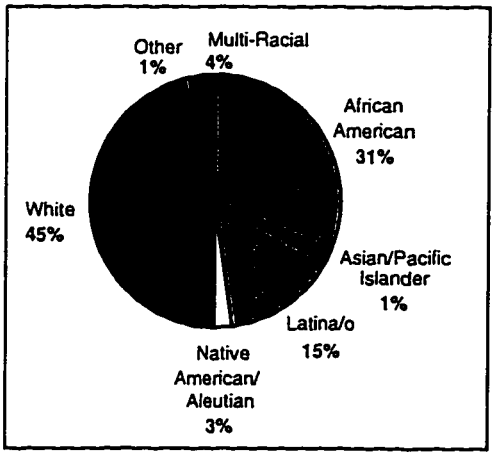


Figure 6 Race/Ethnic Group's Percentage of Sample Data Set

Gender

The majority of sample data set respondents are men (n=2164, 76% of sample), though 22% of the sample are women (n=623). Fifty respondents indicated that they are transgender.

On some questionnaires respondents were given the opportunity to indicate the direction of their gender change. Of the 42 transgender respondents with that option, 32 indicated a male to female identity and 10 indicated a female to male identity. Unfortunately, there were no definitions offered on the questionnaires for the term "transgender". Because of this and due to the widely divergent understanding of the term, it is difficult to know if transgender respondents indicated such because they have undergone surgical gender change, hormonal treatment, or only have an identity as a member of the opposite gender and have not undergone surgical or hormonal interventions.

Gender and Race/Ethnicity

Table 8a shows that the race/ethnicity composition of the sample is different for men and women. The largest group of women in the sample data set (45%) are African American, followed by white female respondents (31%). Only 27% of male respondents are African American and the majority of male respondents (51%) are white. Both men and women are approximately 15% Latino/a. Only 2,766 respondents provided information about both their gender and their race/ethnicity.

Nearly half of the transgender respondents are African American (45%, n=23). Thirty percent (n=15) are white and 16% (n=8) are Latino/a. One transgender respondent is Asian/Pacific Islander and two are multiracial. Table 8b shows the gender and race/ethnicity of respondents by locale and shows significant discrepency across locations.

Table 8a
Race/Ethnicity of Female and Male Respondents
n=2,766

Race/Ethnicity	Women		Men	
	Number	Percent of Women	Number	Percent of Men
African American	280	45%	579	27%
Asian or Pacific Islander	11	2%	24	1%
Latina/Latino	98	16%	308	14%
Native American/Alaskan	14	2%	55	3%
White	190	31%	1089	51%
Multi-racial	20	3%	71	3%
Other	8	1%	19	1%
TOTAL	**621**	**100%**	**2145**	**100%**

Table 8b
Respondents' Race/Ethnicity by Locale:
Number and Percentage of Locale

Race/Ethnicity	Chicago		Alameda		Wash-ington		Contra Costa		Riverside/S. Bernardino		Phoenix	
Female Afr Amer.	90	11%	130	22%	11	3%	21	25%	22	4%	6	1%
Male Afr Amer.	263	33%	217	37%	12	3%	25	29%	40	8%	22	5%
Female Asian/P.I.	6	1%	4	1%	0		0		0		1	1%
Male Asian/P.I.	6	1%	6	1%	3	1%	1	1%	5	1%	3	1%
Latina	47	6%	24	4%	3	1%	1	1%	17	3%	6	1%
Latino	107	14%	44	8%	15	4%	2	2%	88	17%	52	12%
Female Nat Amer	5	1%	2	1%	4	1%	1	1%	1	1%	1	1%
Male Native Amer	4	1%	2	1%	12	3%	0		12	2%	25	6%
Female White	42	5%	38	7%	58	16%	14	17%	22	4%	16	4%
Male White	189	24%	93	16%	220	62%	16	19%	285	54%	286	68%
Female Multi-race	10	1%	6	1%	0		0		4	1%	0	
Male Multi-racial	24	3%	6	1%	10	3%	0		31	6%	0	
Female Other	0		3	1%	2	1%	3	4%	0		0	
Male Other	0		5	1%	5	1%	5	1%	1	1%	4	1%

Sexual Orientation

Two communities in the sample data set, Washington State and Phoenix, did not ask respondents about the gender of their primary sexual partners. When the question was included in questionnaires respondents were asked to indicate if they are:

- a man who has sex only with other men (MSM),
- a woman who has sex only with other women (lesbian),
- a man or woman who has sex with people of both the same and opposite gender (bisexual),
- or a man or woman who only has sex with people of the opposite gender (heterosexual).

Figure 7 shows that there are approximately as many heterosexual respondents (n=832) as men who have sex with men (MSM) (n=812). There are 285 respondents who are bisexual and only 38 women who only have sex with other women. It should be noted that respondents' sexual identification should not be confused or synonymous with the route of transmission of the HIV virus. For instance, that a male respondent has sex only with men does not indicate that he contracted the HIV virus through unprotected anal intercourse. Similarly, it is unlikely that all of the heterosexual respondents contracted HIV through intercourse.

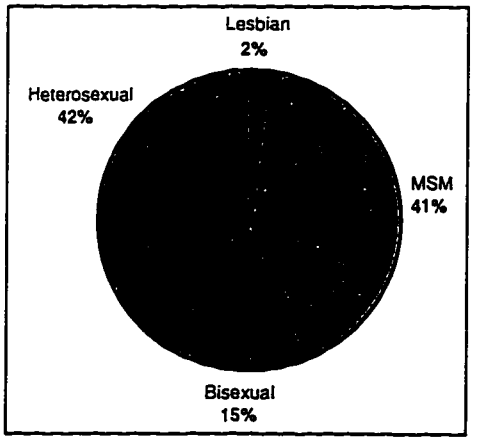


Figure 7 Sexual Orientation of All Respondents

Table 9 shows the sexual orientation of respondents by locale. Washington and Phoenix respondents were not asked about their sexual orientation. It

shows that Riverside/San Bernardino respondents are much more likely than other respondents to be men who have sex with men while Chicago and Contra Costa County have high proporations of heterosexual respondents .

Table 9
Respondents' Sexual Orientation by Locale: Number and Percentage of Locale

Sexual Orientation	Chicago		Alameda		Contra Costa		Riverside/S. Bernardino	
MSM	224	29%	218	37%	11	13%	356	67%
Bisexual	109	14%	123	21%	2	2%	51	10%
Lesbian	8	1%	22	4%	4	5%	2	1%
Heterosexual	425	56%	222	38%	65	79%	119	23%

Monthly Income

The next several pages provide different examinations of the monthly income of sample data set respondents. Please refer to the Methodology Chapter for information about the construction of the income categories. Figure 8 shows that the vast majority of respondents (n=1,946, 72%) make an average of less than $667.00 per month. An additional 11% (n=306) make an average of $825.00 - $1042.00 per month. Five percent make an average of $1,225 - $1,750.00 per month, and 7% (n=189) make more than $2,000.00 per month. The graphs that follow provide greater understanding as to which respondents are represented in each of the income categories by showing a breakdown of the categories by gender, race/ethnicity, and sexual orientation.

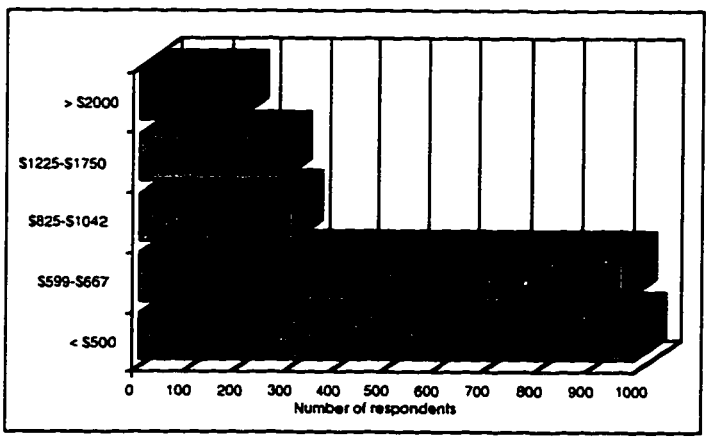


Figure 8 Monthly Income of All Respondents (n=2,716)

Table 10 shows the income of respondents by locales. It shows that a greater percentage of Chicago respondents make less than $500.00 than do respondents from all other locales. Riverside/San Bernardino respondents appear to have the highest incomes with 30% of respondents making $1,225.00 or more a month compared to 8-20% in all other locales.

Table 10
Respondents' Average Monthly Income by Locale:
Number and Percentage of Locale

Average Monthly Income	Chicago		Alameda		Wash-ington		Contra Costa		Riverside/S. Bernardino		Phoenix	
< $500.00	382	48%	178	31%	131	38%	18	22%	122	24%	152	37%
$599-667.00	230	29%	290	51%	94	27%	47	57%	160	31%	142	35%
$825-1042.00	72	9%	44	8%	48	14%	10	12%	81	16%	51	12%
$1225-1750.00	53	7%	35	6%	56	16%	6	7%	100	20%	25	6%
> $2000.00	53	7%	25	4%	15	4%	1	1%	50	10%	42	10%

Gender

Figure 9 shows that, in general, male respondents make more money than do female respondents. For instance, while 80% of female respondents make less than $667.00 per month, only 69% of the male respondents earn the same. Eight percent of male respondents earn more than $2000.00 per month while only 3% of the female respondents earn more than $2000.00 per month.

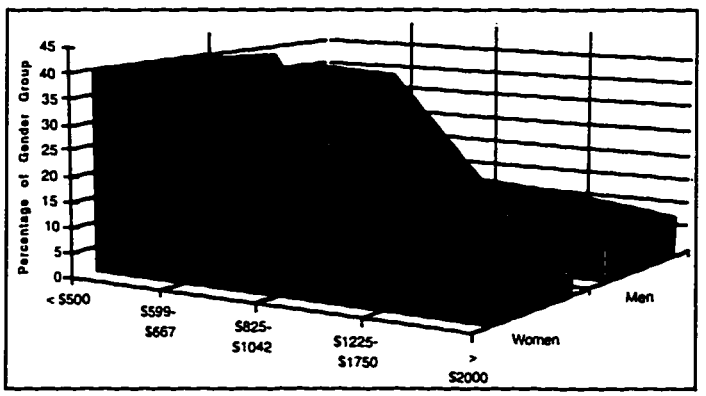


Figure 9 Monthly Income for Male & Female Respondents

Race/Ethnicity

Figure10 shows the same data across race/ethnicity groups with more than 50 respondents in the study. They show that white and Asian/Pacific Islander respondents are over-represented n higher income ranges while other people of color are over-represented in the lower income ranges For instance while 11% of the white respondents make more than $2,000.00 per month, only 2% of African American and Native American respondents and 3% of Latina/o respondents make more than $2,000.00 per month. Conversely, 86% of African American, 80% of Native American, and 75% of Latino/a respondents earn less than $667.00 per month while only 61% of white respondents earn less than $667.00 per month. Mixed race respondents are represented at both ends of the income scale.

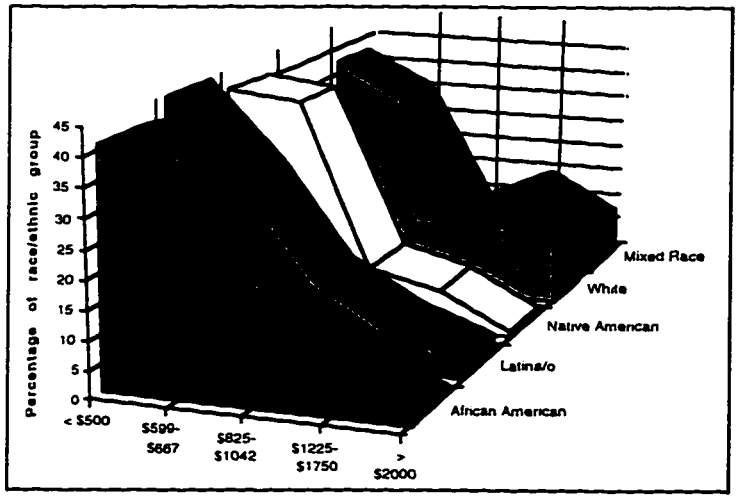


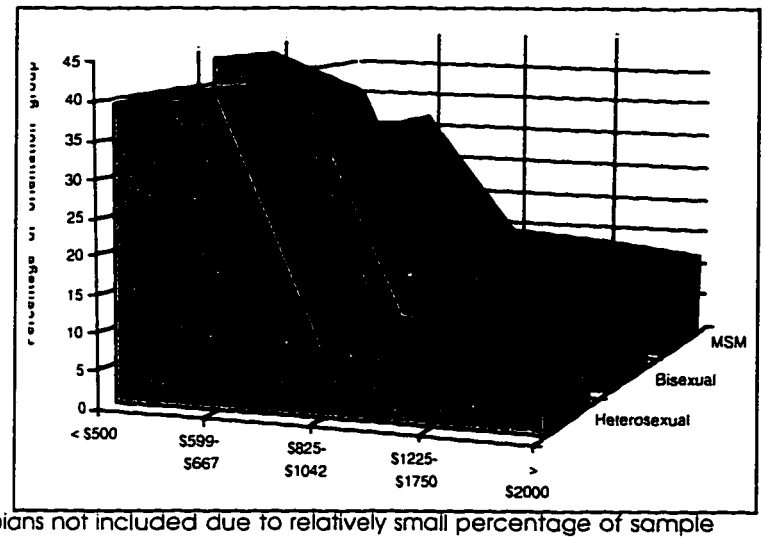
Figure 10 Monthly Income by Respondents' Race/Ethnicity

Sexual Orientation

Figure 11 presents income data for respondents who identify as heterosexual, men who have sex with men, or bisexuals. The number of lesbian respondents on whom income data is available is so small as to call into question the variability of the subsample. Of 37 lesbian respondents, all but three made less than $667.00 per month. The remaining three are spread evenly throughout the remaining income categories.

Figure 11 shows that men who have sex with men are over-represented in higher income ranges while bisexual and heterosexual respondents are

over-represented in the lower income ranges. For instance 12% of men who have sex with men make more than $2,000.00 per month, but only 3% of heterosexuals and bisexuals make more than $2,000.00 per month. Conversely, 81% of bisexual respondents, and 80% of heterosexual respondents earn less than $667.00 per month while 60% of men who have sex with men make less than $667.00 per month.



Lesbians not included due to relatively small percentage of sample

Figure 11 Monthly Income by Respondents' Sexual Orientation

The discrepancies across gender, race/ethnicity, and sexual orientation groups likely mirrors two trends. First, socioeconomic inequities across race/ethnicity and gender plague the entire US population. For instance, in 1993, compared to the median full-time worker's income for white men of $31,832.00: African American men earned $23, 566.00,

Latinos earned $20,423.00,
white women earned $22,979.00,
African American women earned $20,315, and
Latinas earned $17,112.00 (The Reference Press, 1995).

Second, the epidemiology of HIV disease itself carves out distinct demographic groups; distinct groups for whom the aforementioned income inequities are particularly salient. Initiated largely in the white gay male community in the United States, HIV has been moving rapidly into poor communities of color, increasing among women, all of whom earn less than their male counterparts. The graphs are showing the two-tiered

socioeconomic status of the people infected with HIV/AIDS in the United States, one tier *largely* including white men, the other *largely* including people of color. This is further discussed later in this section and others.

Percentage of sample living below the poverty level.

In attempting to determine the percentage of the sample living below the poverty line a significant percentage of the sample was eliminated. Because the questionnaire asked only for individual income data it is impossible to know the household income available to those who live with other adults. Because of this, the most conservative estimations were calculated. That is, only respondents who live in households in which their income appears to be the only source of income are included. The respondents included are:

- people who live alone, and
- single parents with children under the age of 18 living in the home.

Not included were respondents who indicated they live with another adult. These included respondents who live with their family or parents, partner, or friends.

Table 11 shows the 1995 poverty threshold for a single person and for several size families. It shows the number of respondents in the data set in each household size category. Then it shows the number and percentage of those respondents that are living at or below the poverty threshold.

Table 11 does not include all participants who are single parents or single adults. Only respondents with complete data on monthly income and household composition variables are included. This requirement culled out several possible respondents, especially single parent respondents, as Washington State respondents were not asked for information about their children and Phoenix respondents were asked for neither the number of people living in their households, nor the age of their children.

Table 11
Sample Data Set Respondents Living At or Below 1995 Poverty Thresholds [15]

Household Size	1995 Annual Income Poverty Threshold	Number of respondents	Number & Percent at or below poverty threshold	
1 adult	$7,929.00	809	567	70%
2 people: 1 parent, 1 child	$10,504.00	46	34	74%
3 people: 1 parent, 2 children	$12,278.00	37	29	78%
4 people: 1 parent, 3 children	$15,509.00	23	22	96%
5 people: 1 parent, 4 children	$17,909.00	10	7	70%
6 people: 1 parent, 5 children	$19,983.00	5	5	100%
7 people: 1 parent, 6 children	$21,911.00	1	1	100%

Table 11 shows that of the single adults who live alone and on whom all necessary data for calculation are available, more than $^2/_3$ (70%) are living at or below the poverty line. The situation is even worse for the single parent families with complete data. Eighty percent of these families (98 of 122) are living at or below the poverty line. Figures 12a and 12b show that single parent families are more likely to be headed by women of color, especially African American women, and people who live alone are more likely to be white males.

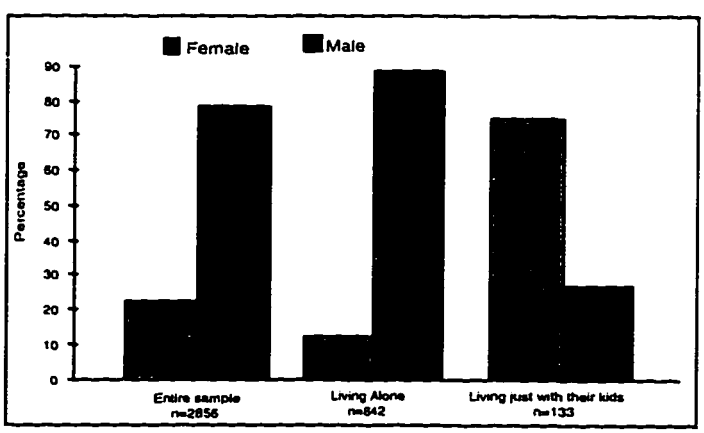


Figure 12a Gender of Entire Sample Compared to Those Who Live Alone and With Only Their Children

[15] Source: US Census Bureau, The Official Statistics, http//www.census.gov.

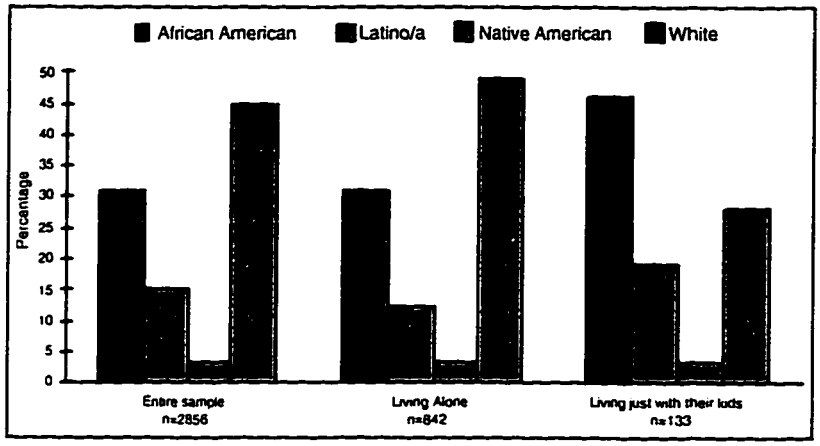


Figure 12b Race/Ethnicity of Entire Sample Compared to Those Who Live Alone and Those Who Live With Only Their Children

HIV Status

Figure 13 shows that the HIV status of respondents is evenly represented across the three following categories:

HIV+ diagnosis with no symptoms,
HIV+ diagnosis with symptoms, and
AIDS diagnosis.

This is fortunate because it is important for program planning and policy considerations for a spectrum of housing services from rent subsidies to on-site care facilities.

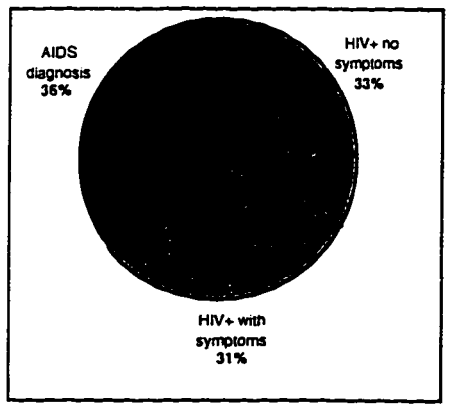


Figure 13 HIV Status of Entire Sample

Figures 14a and 14b show that though HIV status is distributed evenly across the sample as a whole, when the sample is examined by gender and race/ethnicity the even dispersion is not maintained. For instance, male

respondents are more likely to be in latter stages of HIV disease than are women. White respondents are more likely to be in latter stages than are people of color in general (56.8% of white respondents versus 43.2% of respondents of color have an AIDS diagnosis), but not more so than Latinos. This general difference is likely mirroring the demographic epidemiology of the disease in the United States as it progresses increasingly in communities of color. Not surprisingly, the average age of respondents with an AIDS diagnosis is higher than those who are HIV+ without an AIDS diagnosis (39.7 versus 37.3 respectively).

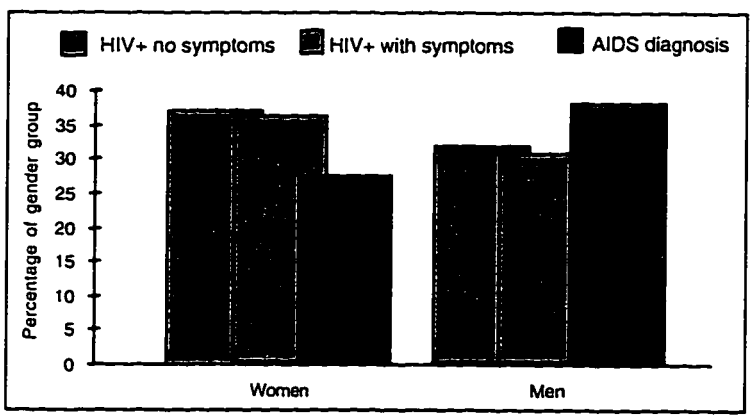


Figure 14a Respondents' HIV Status by Gender

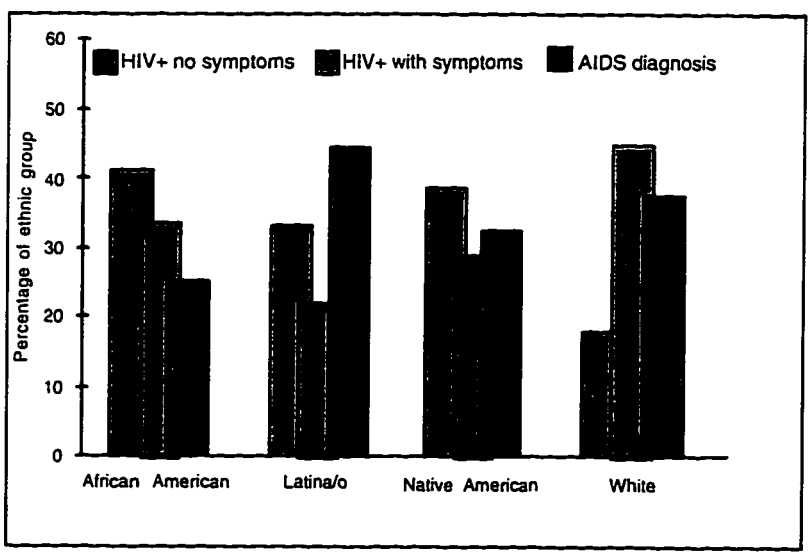


Figure 14b Respondents' HIV Status by Race/ Ethnicity

Table 12 shows respondents' HIV status by locales and shows considerable discrepancy across sites. For instance, while nearly half (46%) of Chicago

respondents are HIV+ without symptoms, only 12% of Phoenix respondents are HIV+ without symptoms.

Table 12
Respondents' HIV Status by Locale:
Number and Percentage of Locale

HIV Status	Chicago	Alameda	Wash-ington	Contra Costa	Riverside/S. Bernardino	Phoenix
HIV+ no symptoms	362 46%	155 25%	91 25%	26 30%	231 43%	47 12%
HIV+ w/ symptoms	210 26%	246 40%	87 24%	18 21%	110 20%	204 54%
AIDS diagnosis	224 28%	215 35%	187 51%	42 49%	198 37%	127 34%

Age

The mean age of the entire sample (in 1995) is 38.1 (s=9.1). The median age is also 38 years old and the mode is 39 years old. The youngest respondent was 8 years old. The eldest was 82 years old. Table 13 shows the mean age and standard deviation of respondents by locale.

Table 13
Respondents' Age by Locale:
Mean and Standard Deviation

Respondents' Age	Chicago	Alameda	Wash-ington	Contra Costa	Riverside/S. Bernardino	Phoenix
Mean & St Deviat'n	38.7 8.1	38.9 8.8	38.4 9.0	42.8 7.3	39.4 8.9	33.3 10

Respondents' Household Composition and Presence of Children in Home

In all locales represented in the sample data set respondents were asked to indicate with whom they are currently living. The modal response to this question was "alone". Of the 2,605 respondents on whom household composition data is available (there is missing household composition data on 251 respondents) 32% indicate living alone.

Figure 15 shows that of those respondents who do not live alone, fully a third live with just their partner. Another large portion (23%) of respondents not living alone are living with parents or other family members, equal to those living with friends or roommates. Only 154 respondents live with just

their children. An additional 76 respondents live with their children and partner.

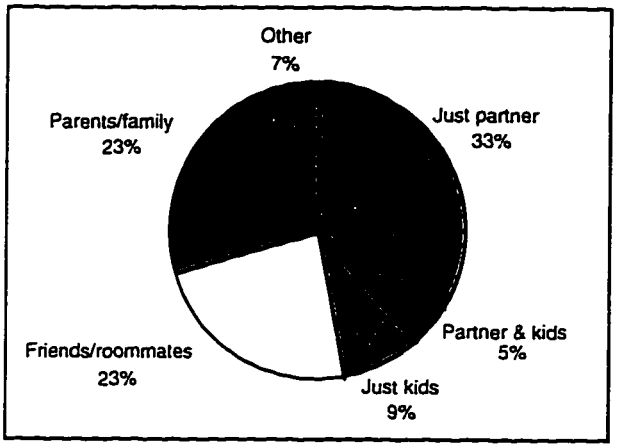


Figure 15 Covivants of Respondents Who Do Not Live Alone (n=1,763)

Of those respondents who live with children:

36% live with one child,
31% live with two children,
19% live with three children,
9% live with four children, and
5% live with 5 or more children.

Substance Use Among Respondents

Respondents were asked to indicate which of several groups of drugs they use. These groups include alcohol, marijuana, crack/cocaine, and heroin. The data simply indicate whether or not a respondent uses each substance. Neither frequency or quantity of use is included. This poses interpretation problems, particularly for alcohol use and marijuana use. However, it is assumed, in this study, that any use of hard drugs--crack/cocaine and heroin--is interpretable as problematic.

Fourteen percent (n=394) of the sample did not answer questions about substance use. Unfortunately, it is impossible to know if this indicates they do not use substances (though non-use was a possible response on the questionnaires) or if they felt uncomfortable indicating the kinds of substances they do use. If the latter is the case, this may call into question the validity of the data that do exist. However, there is research to indicate

that when people are confident that the information they provide about personal substance use is anonymous, reporting is largely accurate, though usually tends to be under-reported (Coates, et al., 1988; Hancock, et al., 1991; Poole, et al., 1996). With this in mind, it may be appropriate to assume that the substance use that is reported here is slightly under-reported.

Fully one half (n=1,248; 50.5%) of all respondents who answered questions about substance use (n=2470) indicated that they do not use any substances other than prescription drugs. Tobacco use was not included in any of the questionnaires.

Figure 16 shows the percentage of the entire sample that use the four groups of drugs listed above. A third of respondents (n=958; 33%) report using alcohol; nearly a quarter (n=691; 24%) report using marijuana. Crack or cocaine use is reported by 17% (n=494) of respondents and 8% (n=226) report using heroin. Table 14 compares the percentage of the sample data set respondents who use these substances to the percent of the US population that reported using the substances in 1993. Not surprisingly, Table 14 shows that sample respondents use at higher percentages than the US population at large, except in alcohol use. Younger respondents are more likely to use all drugs listed, except crack/cocaine, at greater percentages than older respondents.

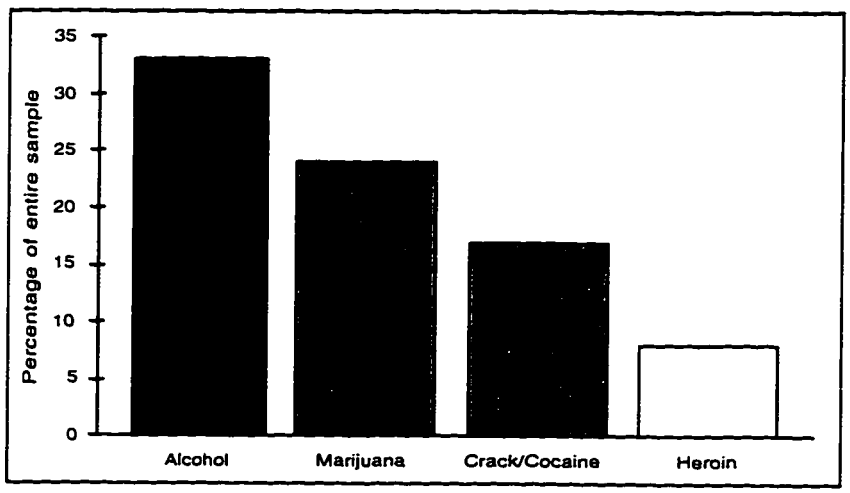


Figure 16 Substance Use of Respondents

Table 14
Percentage of Sample Data Set and US Population [16]
Using Selected Drugs

	Alcohol		Marijuana		Crack/ Cocaine		Heroin	
	Sample	US	Sample	US	Sample	US	Sample	US
18-25 years old	n=188 57.4	59.3	38.3	11.1	11.2	1.5	12.2	.4
26 and older	n=2489 31.5	52.1	22.9	3.0	13.8	.5	7.4	<.2

Substance Use and Gender

Figure 17 shows the use of these same substances. However, it shows the significant discrepancy between male and female respondents in substance drug use. It shows that, on average, men are more likely to report using alcohol and marijuana while women in the sample data set are more likely to report using hard drugs such as heroin or crack/cocaine. In fact, women in the sample data set are twice as likely as men in the sample to use hard drugs.

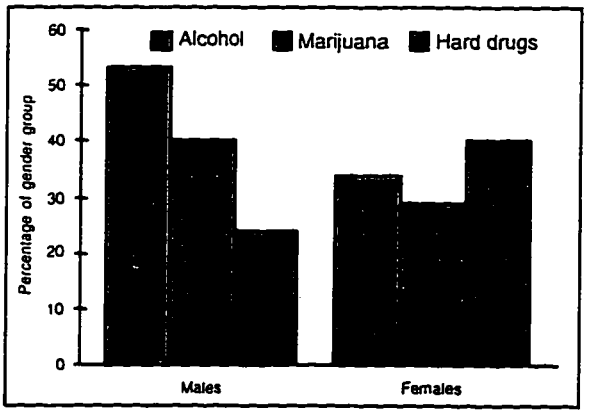


Figure 17 Substance Use by Gender Group

Substance Use and Race/Ethnicity

Figure 18 presents the same data by race/ethnic group. It shows that the majority (60%) of white and Native American respondents use alcohol, while alcohol is used significantly less in other respondents of color.

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[16] These are 1993 figures. Source: The Reference Press, 1996.

Marijuana use is also highest among white and Native American respondents. Hard drug use is more prevalent in all respondents of color than in white respondents. Asian/Pacific Islander respondents are not included here due to the limited number of respondents in each category.

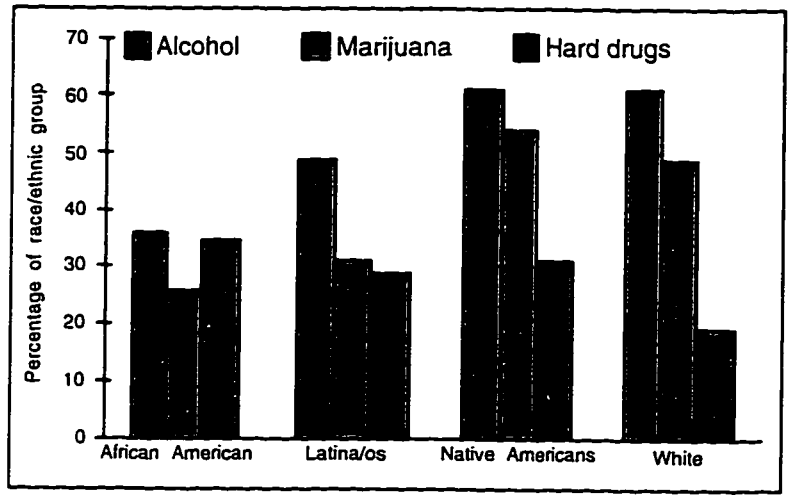

Figure 18 Substance Use by Race/Ethnic Group

Substance Use and Race/Gender

Figure 19 presents this data in greater detail by showing the substance use of respondents by race and gender group. Across race/ethnic groups hard drug use is higher among women than among men in all but Hispanic respondents.

In many cases, there is more difference in substance use between males and females within race/ethnic groups then across race/ethnic groups. For instance, 39% of white female respondents (n=38) versus 16% of white male respondents (n=85) report using hard drugs. The greatest difference in hard drug use between race/ethnic groups is between white respondents at 19% (n=123) and African Americans at 36% (n=256).

Female African American respondents are the most likely to use hard drugs: 44% of African American female respondents use hard drugs. Male white respondents are the least likely to be hard drug users. However, only male Native American respondents use alcohol and marijuana at higher rates than do male white respondents. Female Native American respondents use at the lowest rates of all the race/gender groups presented here.

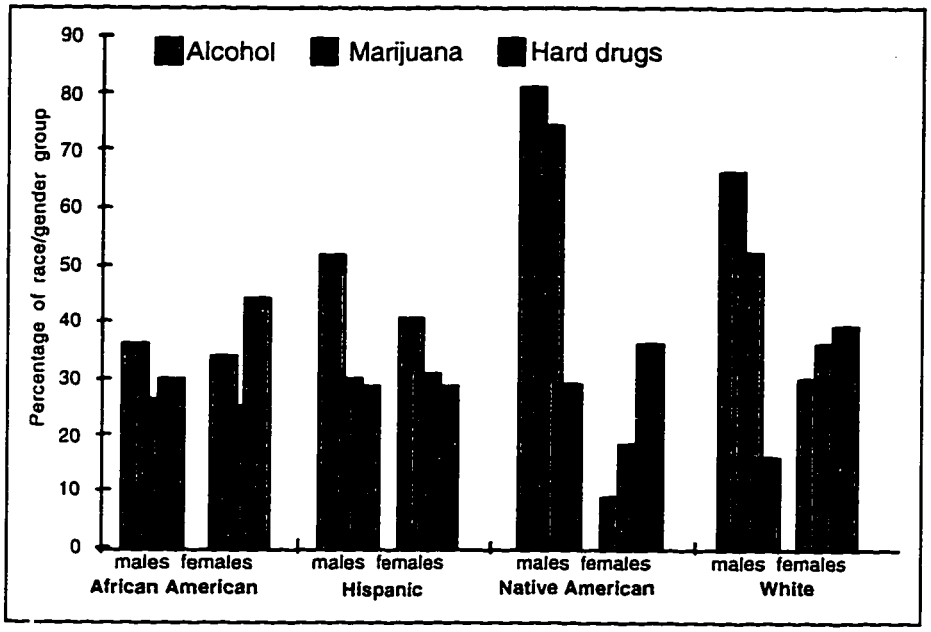

Figure 19 Substance Use by Race/Gender Group

Table 15 shows respondents alcohol and drug use by locale. It indicates that more Phoenix respondents drink alcohol than do respondents in other locales and there is a wide range of marijuana use across many locales. Most startling is the high percentage of Contra Costa respondents who report using hard drugs compared to the percentage of respondents from other locales.

Table 15
Respondents' Substance Use by Locale:
Number and Percentage of Locale

Substance	Chicago	Alameda	Wash-ington	Contra Costa	Riverside/S. Bernardino	Phoenix
Alcohol	227 28%	173 28%	122 33%	31 36%	164 30%	240 56%
Marijuana	130 16%	164 27%	115 32%	32 37%	100 19%	149 35%
Crack	60 7%	122 20%	6 2%	20 22%	16 3%	36 8%
Cocaine	102 12%	67 11%	16 4%	35 40%	12 2%	
Heroin	72 9%	65 11%	3 1%	39 45%	7 1%	39 9%

Substance Abuse Treatment Among Respondents.

All communities except Washington State and Phoenix asked respondents if they were in any of the following substance abuse treatment programs:

- 12 step program
- drug-free counseling program
- methadone treatment
- residential substance abuse treatment program
- detox center

Of the 2,069 respondents in Chicago, Alameda County, Contra Costa County, and Riverside/San Bernardino Counties, 502 respondents (24%) indicated they were in treatment.

Most are in a 12 step program by itself or in combination with other treatment programs. Thirty-four percent of those in treatment are in just a 12 step program. An additional 45 respondents (9% of those in treatment) are in a 12 step program in combination with one or more other treatments (except methadone treatment, which is discussed in the following paragraph) for a total of 43% of respondents in treatment.

Twenty-nine percent (n=144) reported being in just methadone treatment. Forty-three respondents (9%) are in a combination of methadone treatment and other treatments. This sums to 38% of those treatment.

Thirteen percent (n=65) of those in treatment were in drug free counseling programs and the remaining 6% reported being in either a residential treatment center or a detox center.

Though Phoenix respondents were not asked about involvement in treatment programs they were asked if they had formerly used hard drugs. One hundred twenty-five respondents (29% of the Phoenix respondents) indicated they had formerly used hard drugs.

Drug Use During Treatment

Of those who reported being in treatment, 125 (25%) also report using alcohol, 98 (20%) report using marijuana, and 152 (30%) report using hard drugs. Only 45% of the respondents in treatment report using no substances other than prescription drugs.

History of Incarceration

Only respondents in San Bernardino/Riverside Counties and Chicago (n=1,364) were asked if they had ever been incarcerated. In Chicago residents were asked "Have you ever been in jail?" and in San Bernardino/Riverside respondents were asked "Have you ever been in prison?"

Of all respondents in the two communities, 27% (n=362) indicated they had been incarcerated at some time. Unfortunately, there is no ability to know if respondents were incarcerated on misdemeanor or felony charges.

Table 16 presents data across several demographic groups comparing the general Chicago and San Bernardino/ Riverside subsample to the proportion of those who have been incarcerated and those who have never been incarcerated. For instance, it shows that while homeless people comprise 7% of the subsample, they comprise 15% of those who have been previously incarcerated, indicating that the homeless respondents are more likely to have engaged in criminal behavior than are those who are not homeless. Female respondents comprise the same proportion of those with histories of incarceration as those without, indicating that women in this subsample are as likely to have been previously incarcerated as the males in the sample data set–unlike the general incarcerated population of 93% male[17]. People of color are over-represented among those with a history of incarceration.

Table 16
Comparison of People with History of Incarceration to Those Without on Selected Demographic Variables n=362

Demographic Characteristics	Chicago and San B./ Riverside Respondents	Self-Reported History of Incarceration n=362	No Self-Reported History of Incarceration n=1002
% Now homeless	7%	15%	4%
% Male	79%	79%	79%
% African American	31%	47%	25%
% Hispanic	20%	23%	18%
% Native American	2%	1%	2%
% White	40%	22%	48%

[17] Percentage of adults in prisons or jails between 1980 and 1992 who are male. Source: The Reference Press, 1996.

While it is impossible to know why respondents were incarcerated, an examination of the difference in hard drug use between those who have been incarcerated and those who have not may provide evidence that incarceration is drug-related. Table 17 shows that alcohol and marijuana use is no different for those who had been incarcerated compared than for those who had not. However, hard drug use (including crack, heroin, or cocaine) was significantly more prevalent in respondents who have been incarcerated (χ^2=77.05; p <.01).

Table 17
Drug Use Among Those Previously Incarcerated and Those Not Previously Incarcerated
n=989

	Percent Reporting Alcohol Use	Percent Reporting Marijuana Use	Percent Reporting Hard Drug Use
Previously Incarcerated	37.3%	21.5%	33.1%
Never Incarcerated	38.7%	23.3%	10.2%

Similarly, 60.2% of those respondents who reported using hard drugs also reported previous incarceration. Only 25.8% of those who do not report using hard drugs have been previously incarcerated.

Homelessness Among Sample Data Set Respondents

Previous Homelessness

More than one third (n=898; 37%) of the respondents who were asked about previous homelessness (all but Phoenix respondents were asked) report having been homeless at sometime in their lives. No definition of "homeless" was included on the questionnaires so this finding is difficult to interpret. It is impossible to know if respondents who indicate they had been homeless had lived on the streets or in a shelter or if, for instance, they may have had to stay with friends or family during a month of financial hardship or mobility.

In Alameda, San Bernardino/Riverside, and Contra Costa counties and Washington State respondents were asked how many times they had been homeless in the three previous years. Of the 561 respondents living in those

locales who had indicated being homeless in the past, 42% either indicated none (0) or left the question blank. The majority of those who had been homeless in the past three years indicated they had been homeless only once (n=159; 49%). An additional 25% (n=81) had been homeless twice in the past 3 years and 19% (n=61) had been homeless 3-5 times. The remaining 7% (n=24) had been homeless six or more times in the previous three years.

Current Homelessness

To determine the current homelessness of respondents the place of residence was used. For the purposes of this study, respondents are considered currently homeless if they report living:

- on the streets,
- in abandoned buildings or cars,
- in transitional or emergency/shelters, or
- in hotels/motels.

There are 235 respondents (8.2% of the sample data set) who were homeless at the time of questionnaire completion. The following section explores in greater depth the characteristics of respondents who are homeless compared to those who are currently housed.

Differences Between the Currently Homeless and Those Currently Housed

As the imperative to allocate AIDS housing funds toward those at greatest risk of homelessness strengthens, it is important to increase our knowledge of the variety of needs, in addition to shelter, and issues of people with HIV who may be at risk of homelessness. This section attempts to cull out characteristics that may be distinctive to homeless people by examining the differences between sample data set respondents who are currently homeless and those who are currently housed. Table 18 presents some of these differences at a glance. It presents the percentages across many demographic variables for both the currently homeless and the currently housed and provides statistical information about the degree to which these two groups differ. The remainder of this section expands upon each of these areas to provide more depth of understanding on each variable.

Table 18
Comparison of Currently Homeless Respondents with Those Not Homeless

Variable	Homeless		Housed		stat	n	*P*
	Number	Percent	Number	Percent			
Race/ethnicity					χ^2=		
African American	106	45.1	751	30.4	29.51	2531	< .01
API	4	1.7	31	1.3			
Latina/o	26	11.1	363	14.7			
Native American	9	3.8	54	2.2			
White	75	31.9	1147	46.4			
Mixed race	7	3.0	85	3.4			
Other	3	1.3	24	1.0			
Gender					χ^2=		
Female	60	25.5	540	21.8	1.85	2643	> .05
Male	168	71.5	1875	75.8			
Transgender	4	1.7	44	2.0			
Age	n=208	mean: 35.6 sd: 9.3	n=2348	mean: 38.6 sd: 8.8	*t*= -4.38	2556	< .01
HIV Status					χ^2=		
HIV+ no symptoms	79	33.6	799	32.3	30.11	2649	< .01
HIV+ w/ symptoms	101	43.0	711	28.8			
AIDS diagnosis	49	20.9	910	36.8			
Monthly Income					χ^2=		
< $500.00	137	58.3	778	31.5	96.40	2581	< .01
$599- $667	74	31.5	847	34.5			
$825- $1042	6	2.5	289	11.8			
$1250- $1750	2	.8	265	10.7			
> $2000	0	0	183	7.4			
Sexual Orientation					χ^2=		
MSM	33	14.0	748	30.2	44.31	1895	< .01
Lesbian	10	4.3	28	1.1			
Bisexual	32	13.6	247	10.0			
Heterosexual	98	41.7	703	28.4			
Prev. Homeless	149	63.4	725	29.3	χ^2= 163.59	2282	< .01
Children in home	11	5.4	253	11.0	χ^2= 6.09	2499	.01

Table 18 continues on following page

Table 18, Continued
Comparison of Currently Homeless Respondents with Those Not Homeless

Variable	Homeless		Housed		stat	n	P
	Number	Percent	Number	Percent			
Alcohol Use	107	51.7	787	46.7	χ^2= 1.83	1892	> .05
Marijuana Use	63	32.8	585	36.4	χ^2= .98	1727	> .05
Hard Drug Use	97	41.3	367	14.8	χ^2= 65.65	1727	< .01
History of Incarceration	54	23.0	298	12.1	χ^2= 47.42	1285	< .01

Relative Risk of Current Homeless:

Relative risk (RR) rates for current homelessness were calculated for each of the categories in Table 18. Relative risk rates estimate the magnitude of an association between an outcome variable, in this case homelessness, and an antecedent, or independent variable. It computes the likelihood of an outcome in the presence of the independent variable relative to its likelihood in the absence of the independent variable. For instance, a relative risk can be computed to determine the likelihood of being homeless when hard drug use is present relative to when it is not.

These risk rates are presented below. In each case the relative risk was calculated using the following formula:

$$\frac{\text{prevalence of homeless within a group}}{\text{total n of that group}} \Big/ \frac{\text{prevalence of those housed within a group}}{\text{total n of that group}}$$

Previous Homelessness

Respondents who have had an experience of homelessness in the past are 7.7 times more likely to be currently homeless than those who have not had a prior experience of homelessness. Similarly, respondents who are

currently homeless are 4.8 times more likely to have had a previous experience of homelessness than are those respondents who are not currently homeless.

Race/Ethnicity

White respondents are significantly less likely to be homeless than African American respondents and Native American respondents, both groups of whom are more than 2 times more likely to be homeless than are white respondents. Latino/a respondents in this study are only slightly more likely (RR=1.08) than white respondents to be homeless.

Gender

There is no significant difference between male and female respondents and their rates of current homelessness. This is significantly different from the profile of the national homeless population in which, on average, males comprise 75% of the homeless population (Shlay & Rossi, 1992). As in other research on homelessness and gender (Baker, 1994), the presence of children has a mediating effect on the rate of homelessness among the female respondents in this study. Female respondents who do not have children in the home are nearly twice as likely to be homeless as those who do have children in the home. Of the women who are homeless, 19% have their children with them. Eighty-one percent of homeless women in the sample data set do not have children with them. There is only one male in the entire sample who has children and is homeless.

Sexual Orientation

Men who have sex with men in this data set are nearly three times less likely (RR=2.9) to be homeless than are the bisexual, heterosexual, and lesbian respondents when these three groups are combined. Respondents in Washington State and Phoenix were not asked about their sexual orientation so this analysis includes only 72% of the entire sample data set.

HIV Status

Respondents who are HIV+ with symptoms are significantly more likely to be homeless than are both respondents with an AIDS diagnosis and those who are HIV+ but have no symptoms (χ^2=30.11; p <.01). In fact, respondents who

are HIV+ with symptoms are 2.4 times more likely to be homeless than people with AIDS and 1.4 times more likely to be homeless than respondents who are HIV+ but experience no HIV-related symptoms.

Income

As expected, currently homeless respondents are significantly more likely be in the lower income categories (χ^2=96.4; p <.01). In fact, respondents who earn less than $500.00/month are 3 times more likely to be homeless than those who earn more than $500.00/month.

Drug and Alcohol Use

There is no statistically significant difference between the two groups in their alcohol or marijuana use. On the contrary, respondents who use hard drugs are 1.64 times more likely to be homeless than those who do not (χ^2=65.65; p <.01).

Using Toro, et al.'s (1995) model of comparing the substance use of respondents across of spectrum of homelessness, Table 19 shows that a greater percentage of the currently homeless report using all drugs than do those who have been homeless in the past (but are not homeless now) except marijuana. A higher percentage of those who have been homeless in the past report using all drugs than do those respondents who report never having been homeless. This analysis did not include respondents from Phoenix as they were not asked if they had ever been homeless. As a result, percentages are slightly different from those of the entire example.

Table 19
Substance Use by Homelessness Status

Substance	Percentage of respondents who have never been homeless	Percentage of those who have been homeless but are not currently	Percentage of those currently homeless
Alcohol	39.7%	44.8%	51.7%
Marijuana	31.0%	34.9%	32.8%
Cocaine **	6.1%	21.3%	29.4%
Heroin **	5.2%	17.3%	23.6%
Crack **	6.1%	20.5%	27.2%

** chi square $p < .01$

History of Incarceration

Chicago and Riverside/San Bernardino data sets contain information on respondents' previous incarcerations. When these data were analyzed to compare those who are currently housed with those who are currently homelessness, respondents who indicated a history of incarceration were 3.7 times more likely to be currently homeless than respondents who had not been incarcerated.

Multivariate Analyses of Independent and Dependent Variables

Logistic regression analyses were used to identify those independent variables that appear to be the greatest contributors to the likelihood of homelessness among respondents.

Two variables, previously considered as probable independent variables were not used in the these analyses. First, the geographic location variable explaining respondents' rural, urban, or suburban status is not used here because of the differential sampling strategies utilized across locales, and thus geographic locations. Since homelessness is the dependent variable, sampling among homeless and non-homeless respondents across locales would be preferable. However, purposive efforts to survey homeless people were not made in the one rural locale in the sample data set (Washington State) while they were made in urban locales (Chicago, Phoenix, and Alameda County). In San Bernardino/ Riverside Counties, which have urban, rural, and suburban communities, efforts to survey homeless people were made only in the urban centers. Unfortunately, findings of significance in this area could only be interpreted as sampling differences rather than differences in homelessness rates among rural, urban, or suburban respondents.

Second, the history of eviction variable thought to be helpful in understanding what might differentiate homeless respondents from those who are not currently homeless was misunderstood prior to analysis for the dissertation. Eviction data is not available for all respondents. It is available only for those who indicated they had ever been homeless. In other words, only respondents who indicated they had been homeless were asked if they had become homeless due to eviction. Since the majority of

respondents have never been homeless (59% of those asked about previous homelessness), this data is not available for most respondents. While it is interesting to know if respondents became homeless because they were evicted, without eviction data on all respondents (homeless and housed) that data is not useful in delineating people who become homeless from those who do not.

Prior to logistic regression analyses, univariate analyses were conducted to test for the relationships between independent variables. Table 20 presents these analyses and briefly describes relationships where they do exist.

Table 20
Relationships Between Independent Variables*

	Gender	Age	HIV Status	Income	Sexual Orient-ation	House-hold Comp	Kids in home	Hard drug use	Prev. Incar-ceration
Race/ Ethnicity	**χ^2=94.5** p<.001 More women of color	**F=3.9** p<.001 Young to old: Hispanic, Nat. Amer., white, Af. Amer	**χ^2=103** p<.001 Whites in latter stages	**χ^2=196** p<.001 Whites in upper incomes	**χ^2=200** p <.001 Whites & Nat. Amer more likely to be MSM	**χ^2=87** p<.001 Whites more likely to live w/ just partner	**χ^2=93** p <.001 People of color more likely to have kids in home	**χ^2=43** p <.001 Whites least likely to use	**χ^2=90** p<.001 Higher among people of color
Gender		t=-.67 p>.05	**χ^2=25** p<.001 More men w/ AIDS	**χ^2=35** p<.001 More women in lower incomes	**χ^2=530** p<.001 More women among hetero-sexuals	**χ^2=115** p<.001 Males more likely to live alone or w/ just partner	**χ^2=229** p<.001 More women have kids in the home	**χ^2=44** p<.001 Higher use among women	χ^2=.02 p>.05
Age			**F=23.1** p<.001 People with AIDS average 2 yrs older	**F=24.5** p<.001 Low incomes younger than high incomes	**F=3.3** p<.05 MSM/Bi's younger than lesbian/ hetrosex.	**F=19** p<.01 Those living alone are older	**t=-3.9** p>.05 Those w/o kids nearly 2 yrs older	t=-.64 p>.05	t=1.1 p>.05
HIV Status				**χ^2=124** p<.001 HIV+ with symps. over-represnt'd in lower incomes	**χ^2=54** p<.001 More MSM with AIDS; more hetro. are HIV+, not AIDS	χ^2=12 p>.05	**χ^2=17** p<.001 Presence of kids decreases as status worsens	**χ^2=60** p<.001 Highest use among HIV+ with symps.	**χ^2=26** p<.001 HIV+ with symps. have highest rates, PWA's, lowest
Income					**χ^2=113** p<.001 MSM in highest incomes;he trosex. in lowest.	**χ^2=99** p<.001 Those w/ just partner more often in upper incomes	χ^2=3.21 p>.05	**χ^2=99** p<.001 Users are over-rep'd in low incomes	**χ^2=127** p<.001 Prev. incarc. over-rep'd in low incomes
Sexual Orienta-tion						**χ^2=105** p<.001 MSM more likely w/ just partner; het./bi w/ family	**χ^2=141** p<.001 Lesbians & hetro. more likely to have kids in home	**χ^2=109** p<.001 MSM less likely than all others to use. Lesbians & hetro. most	**χ^2=178** p<.001 MSM less likely than all others Lesbians & hetro. most likely

* Statistically significant relationships are in **bold** print

Table 20 is Continued on the Following Page

Table 20 Continued
Relationships Between Independent Variables

	Gender	Age	HIV Status	Income	Sexual Orient-ation	House-hold Comp	Kids in home	Hard drug use	Prev. Incar-ceration
House-hold comp.								χ^2=14.1 p <.01 Most use among those living alone	χ^2=22 p<.001 Most likely to live alone or w/ family
Kids in home								χ^2=.95 p>.05	χ^2=1.4 p>.05
Hard drug use									χ^2=77 p<.001 Users more likely

All variables were recoded in preparation for logistic regression. Values for all dichotomous variables were coded 0 or 1 for ease in interpretation of findings. In each case, 1 was used as the value label for the value correlated to homelessness. For instance, in the case of hard drug use, use was coded 1, non-use was coded 0. Dummy variables created from polytomous variables were created using the category least at risk of homelessness as the reference. Table 21 shows the independent variables and their univariate relationship with the dependent variable by displaying the odds ratio for each. The reference groups are noted as well. The dependent variable, Current Housing Status, was coded 1 for *currently homeless* and 0 for *currently housed.*

Table 21
Odds Ratio for Each Independent Variable in Relationship to the Dependent Variable

Independent Variable	Reference Group	Other Groups	Odds Ratio
Race/Ethnicity (n=2531)	White		
		African American	1.37
		Latino/Latina	.67
		Native American	1.62
Gender (n=2643)	Male		
		Female	1.24
Age (n=2556)			.96
HIV Status (n=2649)	AIDS diagnosis		
		HIV+ no symptoms	1.08
		HIV+ with symptoms	1.56
Monthly Income (n=2581)	> $2,000.00		
		< $500.00	14.74
		$599-667.00	7.31
		$825- 1042.00	1.73
		$1225-1750.00	.63
Household Composition (n=2499)	Lives w/ family		
		Live alone	2.69
		W/ just partner	.53
		Friends/roommates	1.34
Children in Household (n=2499)	Yes		
		No	2.14
Hard Drug Use (n=2622)	No		
		Yes	3.96
Previous Incarceration (n=1285)	No		
		Yes	4.15
Sexual Orientation (n=1895)	MSM		
		Lesbian	2.36
		Bisexual	1.07
		Heterosexual	1.15

Logistic Regression Using Independent Variables Present in All Locales

A model comprised of only those variables on which data were available from each locale was created first. This means that *previous incarceration* data (available only in Riverside/San Bernardino Counties and Chicago) and *sexual orientation* data (available only in Riverside/San Bernardino Counties, Chicago, Alameda County, and Contra Costa County) were not included in this first model. All independent variables were entered as a group, using no stepwise methods. Researcher-driven versus the more mechanical/mathematical stepwise was chosen because of the exploratory nature of the study. Given the exploratory nature of the study it was considered essential to allow previous research and hypotheses as opposed to statistical significance to guide model building (Hosmer & Lemeshow, 1989). Table 22a shows the slope coefficient/log odds, standard error, the variable's partial correlation to the dependent variable, and the odds of homelessness increase for each variable. The Wald statistic and its statistical significance for each variable are then presented.

Table 22a
Coefficients of the Logistic Regression of
All Independent Variables Available in Each Locale
n=1985

Variable	*B*	SE	Partial Cor-relation	Odds Ratio	Wald Statistic	*p*
Constant/ Intercept	-4.35	1.73			6.37	.01
Race/Ethnicity					9.26	.03
African American	.289	.17	.03	1.34	2.76	.09
Hispanic	-.228	.23	.00	.80	.97	.32
Native American	.280	.36	.00	1.32	.59	.44
Gender	-.08	.23	.00	.92	.14	.71
Age	-.018	.01	-.02	.98	2.61	.10
HIV Status			.00		3.26	.20
HIV + no symptoms	.055	.13	.00	1.05	.17	.68
HIV + with symptoms	.19	.13	.01	1.20	2.2	.14
Average Mo'ly Income			.11		21.36	<.001
< $500.00	2.18	1.62	.00	8.80	1.80	.18
$599-667.00	1.69	1.62	.00	5.42	1.07	.30
$825-1042.00	.49	1.67	.00	1.64	.09	.77
$1225-1750.00	.02	1.7	.00	1.02	.001	.99
Household Composition			.23		58.11	<.001
Lives alone	.9353	.13	.21	2.54	50.15	<.001
Lives w/ friend/roommate	-.05	.17	.00	.95	.08	.77
Presence of Children	.45	.46	.00	1.56	.94	.33
Hard Drug Use	.95	.20	.14	2.6	22.53	<.001

The -2 log likelihood of a model with just the constant term is 1053.14. The -2 log likelihood of the entire model is 848.00 indicating a statistically significant improvement in the model. Similarly, both the model chi square and the

improvement chi square is 205.14, p=.0000, indicating a statistically significant improvement between a model including just the constant and the model presented in Table 22a above.

Table 22b shows that the model displayed in Table 22a is not a good model for predicting homelessness among sample data set respondents. Only one homeless respondent was correctly identified as homeless using this model.

Table 22b
Predicted vs. Observed Homeless and Housed Respondents

		Predicted		
		Housed	Homeless	Percent Correct
Observed	Housed	1836	1	99.95%
	Homeless	147	1	.68%

Table 22a shows that when all other variables are held constant, (low) income appears to contribute the most toward the likelihood of homelessness among sample data set respondents. The odds of being homeless for those who earn less than $500.00 a month are 8.8. It also likely accounts for much of the variance in univariate analysis between homelessness and ethnicity.

In addition to income, living alone and the use of hard drugs appear to contribute significantly to the likelihood of homelessness among sample data set respondents, with odds of homelessness of 2.54 and 2.6 respectively. Respondents who are white or Hispanic appear to be less likely to be homeless than those who are either Native American or African American, whose odds of homelessness are both about 1.3. While this pattern does not reflect the ethnic pattern of homelessness across the entire United States it does reflect a pattern distinctive to the western United States in which Latino/as are underrepresented among the homeless (Reyes & Waxman, 1987). Since the sample data set includes only one non-western US community (Chicago) it is likely reflecting a regional difference among the homeless population.

Not surprisingly, it appears that respondents who are HIV+ with symptoms are slightly more likely to be homeless (odds=1.2) than those whose illness is asymptomatic or those for whom high level care has probably already become necessary and, in the best situations, provided. It is likely that those whose illness has become symptomatic have left the workforce or leave the workforce intermittently--a significant contributor to homelessness according to a consensus of researchers in the homeless field (Rossi, 1987; Wright, 1987).

Age appears to contribute only very slightly (odds=.98) to the likelihood of homelessness when all other variables are held constant. In the sample data set, as in the homeless population at large (Shlay and Rossi, 1992) the homeless respondents are younger than those who are not homeless, even when controlling for other variables, including HIV status (respondents with an AIDS diagnosis are older than those in earlier stages).

The presence of children in the home appears to have some impact on the likelihood of homelessness among respondents in the sample data set. The odds of respondents without children in the home being homeless are 1.5. It may be more appropriate to interpret this finding as the identification of a *protective factor* against homelessness as opposed to suggesting that not having children places one at risk of homelessness.

Hosmer and Lemeshow (1989) recommend setting liberal significance levels for the Wald statistics, especially in new fields (such as AIDS-related research) when deciding which variables to include in logistic regression models. For this reason, independent variables with Wald statistics that are significant up to the .4 level are not removed from this model. However, as Table 22a indicates, when all other variables are held constant, gender does not appear to make a strong contribution toward ascertaining the likelihood of homelessness among respondents in the sample data set. In addition, the Wald statistic is not significant, even at a liberal level. The model was run again without the variable.

When gender was removed from the model none of the other coefficients changed appreciably. So it was assumed that gender is not confounded, nor does it appear to interact, with any of the other variables (Hosmer & Lemeshow, 1989). Consequently, it was removed from the model.

Recoding of the polytomous independent variables was pursued as follows to further simplify the model and interpretation of coefficients:

Race/ethnicity was dichotomized to "white and Hispanic" (coded "0") and "African American & Native American" (coded "1"). While this may make sense for samples largely comprised of people living in the western United States due to the under-representation of Latina/o and white people among the homeless (Reyes & Waxman, 1987) as is the case in the sample data set, it would likely not be appropriate for more diverse samples;

HIV status was dichotomized to "HIV+ with symptoms" (1) and "all others" (0);

Average monthly income was dichotomized to "less than $667" (1) and "more than $825.00" (0); and

Household composition was dichotomized to "lives alone" (1) and "all others" (0).

After recoding all variables were once again entered as a logistic regression model. Table 23a shows the coefficients for the variables in this model.

Table 23a
Coefficients of the Logistic Regression of Final Model
n=2025

Variable	*B*	SE	Partial Correlation	Odds Increase	Wald Statistic	*p*
Constant/ Intercept	-5.39	.71			57.39	<.001
Race/Ethnicity (white and Latino/a respondents as reference group vs. African American & Native American respondents)	.60	.19	.09	1.83	10.73	<.001
Age	-.02	.01	-.05	.98	4.33	.037
HIV Status (respondents with AIDS and respondents who are HIV+ without symptoms as reference group vs. those who are HIV+ with symptoms)	.29	.19	.02	1.33	2.39	.12
Income (respondents making more than $825.00/mo. as reference group vs. those making less than $667.00/mo.)	1.91	.43	.129	6.80	19.92	<.001
Household Composition (respondents living with others as reference group vs. those living alone)	1.46	.19	.20	4.34	57.61	<.001
Presence of Children (people with children in the home as reference group vs. those who do not have children in the home)	.72	.44	.025	2.05	2.66	.10
Hard Drug Use (non-users as reference group vs. those who do not use)	.99	.19	.150	2.68	26.13	<.001

The -2 log likelihood of the model with just the constant is 1064.35. It is 881.23 for the above model. The model chi-square and the improvement chi square for the above model are both 183.11; p=.0000, indicating a statistically significant improvement between a model including just the constant and the model presented in Table 23a above.

Table 23b shows the model's ability to correctly predict which sample data set respondents are currently homeless and which are currently housed. It indicates that the model is still not effective in predicting homelessness among respondents. Only 2 of the 149 homeless respondents were correctly predicted by the model to be homeless.

Table 23b
Predicted vs. Observed Homeless and Housed Respondents

		Predicted		
		Housed	Homeless	Percent Correct
Observed	Housed	1876	0	100%
	Homeless	147	2	1.34%

The poor predictive value of the model is no doubt due to the "universality" or inclusiveness of the variables. That is, the specificity of measurement using variables such as ethnicity, gender, income, and others is not great. These are extremely large categories that include a diversity of people. In their research on the differences between homeless people and people who were very poor, Toro, et. al. (1995) found little difference between the two groups.

In addition, there are variables of importance to explaining homelessness that are simply not in the model because the data are not from a study specifically focused on predicting homelessness. A much richer model with variables such as employment history and education, well-defined measures of previous homelessness, mental health measures, early childhood indicators, and others may be necessary to construct a more accurate predictive model.

The purpose of this study, however, is not to increase the ability to *predict* homelessness. It is, instead, to identify variables, from the data available, that place individuals with HIV disease at risk of homelessness. Toward this purpose the logistic regression model presented in Table 23a above indicates that extremely low income, living alone, and hard drug use are, of the variables available in the sample data set, the variables that place respondents included in this model at the greatest risk of homelessness.

The "presence of children" is a variable that may be better identified as a protective factor against homelessness. It seems less appropriate to suggest that not having children places one at risk of homelessness than it does to say that the use of hard drugs places one at risk of homelessness, or being impoverished places one at the risk of homelessness. The

presence of children, especially in the homes of single parents, may actually assure a consistent, though inadequate, income. It may also be the case that people with children have more extended support systems, both informal (extended family members) and formal (school personnel, sport, club or scout troop staff, health care personnel, etc.) that tend to protect against homelessness. The presence of this variable in a risk model may not be appropriate.

Logistic Regression With Only Locations Asking About Respondents' Sexual Orientation

Only four of the six locales represented in the sample data set asked respondents to indicate their sexual orientation. Respondent data from these locales (San Bernardino/Riverside, Chicago, Alameda County, and Contra Costa County) were selected from the larger sample data set for logistic regression that includes sexual orientation in the model. It is important to note that this is a sample different form the sample described in the previous logistic regression analysis and logistic regression models that fit one sample may not fit another (Hosmer and Lemeshow, 1994). This is also a smaller sample. A total of 1,606 respondents are included in this analysis.

For this analysis all variables included in the initial logistic regression analysis described above were included in the model. In addition, a polytomous sexual orientation variable--with MSM as the reference category was added. Table 24 presents the coefficients from this initial analysis

Table 24
Coefficients of the Logistic Regression of Model Including Sexual Orientation
n=1,606

Variable	*β*	SE	Partial Cor-relation	Odds Ratio	Wald Statistic	*p*
Constant/ Intercept	-6.23	2.36			6.94	.008
Race/Ethnicity					3.19	.36
African American	1.28	2.19	.00	3.6	.34	.56
Hispanic	.73	2.2	.00	2.08	.11	.74
Native American	-3.17	6.57	.00	.04	.23	.63
Gender	-.22	.26	.00	.8	.71	.40
Age	-.008	.01	.00	.99	.43	.51
HIV Status			.00		.72	.70
HIV + no symptoms	.08	.14	.00	1.08	.30	.56
HIV + with symptoms	.05	.14	.00	1.05	.15	.70
Average Mo'ly Income	2.0	.53	.125	7.6	14.7	<.001
Household Composition	1.35	.22	.21	3.87	39.03	<.001
Presence of Children	.73	.48	.018	2.08	2.26	.13
Hard Drug Use	.62	.22	.085	1.8	7.9	<.01
Sexual Orientation						
Lesbian	.86	.46	.04	2.3	3.4	.06
Bisexual	-1.67	.24	.00	.85	.48	.48
Heterosexual	.09	.19	.00	1.1	.25	.61

Table 24 indicates that fewer independent variables appear to increase the odds of homelessness among respondents, and that sexual orientation may. A second model, the coefficients of which are presented in Table 25a, shows that independent variables that contributed the most to the increased likelihood of homelessness in the previous model (low income, living alone, and hard drug use) also do so here. In addition, the odds of homelessness for respondents who are lesbian, heterosexual, or bisexual is 2.7 compared to male respondents who have sex with men. Perhaps it is appropriate to say that being a man who has sex with men is something of a protective factor for homelessness, in much the same way that the

presence of children in home is a protective factor. In the heterosexist social climate of the US today it seems indefensible to suggest that being heterosexual places one at risk of homelessness.

Table 25a
Coefficients of the Logistic Regression of a Better Model Including Sexual Orientation Variable
n=1606

Variable	*B*	SE	Partial Correlation	Odds Increase	Wald Statistic	*p*
Constant/ Intercept	-3.82	.56			46.71	<.001
Income (respondents making more than $825.00/mo. as reference group vs. those making less than $667.00/mo.)	1.86	.43	.13	6.41	18.69	<.001
Household Composition (respondents living with others as reference group vs. those living alone)	1.21	.19	.20	3.36	42.02	<.001
Presence of Children (people with children in the home as reference group vs. those who do not have children in the home)	.66	.38	.03	1.9	2.93	.08
Hard Drug Use (non-users as reference group vs. those who do not use)	.67	.19	.1	2.0	11.97	<.01
Sexual Orientation (MSM as reference group vs. all other sexual orientations)	.1.0	.23	.13	2.7	19.28	<.001

The -2 log likelihood of the model with just the constant is 992.23. It is 839.75 for the above model. The model chi-square and the improvement chi square for the above model are both 152.48; p=.0000, indicating a statistically significant improvement between a model including just the constant and the model presented in Table 25a above.

Table 25b shows the model's ability to correctly predict which sample data set respondents are currently homeless and which are currently housed. It indicates that the model is slightly more effective in predicting homelessness among respondents than was the model without data on

previous incarceration. However, only 9 of the 86 homeless respondents (10.47%) were correctly predicted by the model to be homeless.

Table 25b
Predicted vs. Observed Homeless and Housed Respondents When Sexual Orientation Variable is Included

		Predicted		
		Housed	Homeless	Percent Correct
Observed	Housed	1457	0	100%
	Homeless	77	9	10.47%

Logistic Regression With Only Locations Asking About Respondents' Previous Incarceration

Only two of the six locales represented in the sample data set asked respondents to about previous incarceration. Respondent data from these locales (San Bernardino/Riverside and Chicago) were selected from the larger sample data set for logistic regression that includes previous incarceration (and sexual orientation) in the model. It is important to note again, that this is an entirely different and smaller sample. A total of 1,185 respondents are included in this analysis.

For this analysis all variables included in the previous model were included. In addition, the dichotomous incarceration variable was added. As in the model above, gender, ethnicity, age, and HIV status did not have statistically significant coefficients. Table 26a presents the coefficients from the more parsimonious model.

Table 26a
Coefficients of the Logistic Regression of Model Including Previous Incarceration Variable
n=1185

Variable	*B*	SE	Partial Correlation	Odds Increase	Wald Statistic	*p*
Constant/ Intercept	-6.42	.75			73.34	<.001
HIV Status (respondents with AIDS and respondents who are HIV+ without symptoms as reference group vs. those who are HIV+ with symptoms)	.59	.26	.02	1.8	5.2	.02
Income (respondents making more than $825.00/mo. as reference group vs. those making less than $667.00/mo.)	2.33	.73	.001	10.3	10.22	<.01
Household Composition (respondents living with others as reference group vs. those living alone)	1.31	.25	.20	3.7	26.27	<.001
Hard Drug Use (non-users as reference group vs. those who do not use)	1.13	.27	.163	3.1	17.74	<.001
Sexual Orientation (MSM as reference group vs. all other sexual orientations)	.72	.34	.06	2.0	4.39	.03
Previous Incarceration (no history of incarceration as reference group vs. those who have been in jail or prison)	.59	.27	.07	1.8	4.9	.02

The -2 log likelihood of the model with just the constant is 589.01. It is 451.13 for the above model. The model chi-square and the improvement chi square for the above model are both 137.88; p=.0000, indicating a statistically significant improvement between a model including just the constant and the model presented in Table 26a above.

Table 26b shows the model's ability to correctly predict which sample data set respondents are currently homeless and which are currently housed. It indicates that the model is slightly more effective in predicting homelessness among respondents than was the model without data on previous incarceration. However, only 9 of the 73 homeless respondents (10.98%) were correctly predicted by the model to be homeless.

Table 26b
Predicted vs. Observed Homeless and Housed Respondents When Previous Incarceration Variable is Included

		Predicted		
		Housed	Homeless	Percent Correct
Observed	Housed	1050	4	99.62%
	Homeless	73	9	10.98%

Constructing a Homelessness Risk Spectrum

In order to further understand which sample data set respondents might be at the greatest risk of homelessness a homelessness risk spectrum was constructed using the information gained from logistic regression models. The homelessness risk spectrum attempts to identify the degree of risk of homelessness--either low, moderate, or high risk--for each respondent.

This section reports on the four steps taken in the construction of the risk spectrum. The four steps include 1.) constructing a regression model inclusive of the risk factors and exclusive of any *protective factors* that would include all of the respondents. ("History of incarceration" was not included as it would have eliminated the majority of respondents from the analysis.) 2.) Calculating the odds of homelessness for each respondent. 3.) Identifying clusters of scores within the distribution of odds scores in order to begin identifying low, moderate, and high risk groups. 4.) Delineating the three risk levels utilizing the clustered scores and the "previous homelessness" variable. Each step is discussed in detail in this section.

The following section presents information about the profile of each of the groups within the risk spectrum. Chapter 5, the discussion section of the dissertation, explores some of the ramifications of these different profiles for AIDS housing planning, advocacy, and related service provision.

Step One in Constructing the Homelessness Risk Spectrum: Logistic Regression

A regression model including as many respondents as possible (not limited to those who were asked about previous incarceration) was constructed without the hypothesized *protective factors* of "presence of children" or "sexual orientation". Table 27a shows the coefficients from this regression model.

Table 27a
Coefficients of the Logistic Regression for Construction of the Homelessness Risk Spectrum
n=2187

Variable	*B*	SE	Partial Correlation	Odds Increase	Wald Statistic	*p*
Constant/ Intercept	-3.83	.56			46.71	<.001
Race/Ethnicity (white and Latino/a respondents as reference group vs. African American & Native American respondents)	.34	.17	.04	1.41	4.1	<.05
Age	-.04	.01	-.11	.96	17.81	<.001
HIV Status (respondents with AIDS and respondents who are HIV+ without symptoms as reference group vs. those who are HIV+ with symptoms)	.46	.17	.07	1.59	7.69	<.01
Income (respondents making more than $825.00/mo. as reference group vs. those making less than $667.00/mo.)	2.08	.43	.129	6.80	19.92	<.001
Household Composition (respondents living with others as reference group vs. those living alone)	1.46	.17	.20	3.52	54.01	<.001
Hard Drug Use (non-users as reference group vs those who use)	1.01	.18	.16	2.75	32.97	<.001

The -2 log likelihood of the model with just the constant is 1229.27. It is 1033.33 for the above model. The model chi-square and the improvement chi square for the above model are both 195.95; p=.0000.

Table 27b shows the model's ability to correctly predict which sample data set respondents are currently homeless and which are currently housed. It indicates that the model is approximately as effective in predicting homelessness among respondents as the model including the presence of children variable. Only 4 of the 147 homeless respondents were correctly predicted to be homeless by this model.

Table 27b
Predicted vs. Observed Homeless and Housed Respondents in Risk Spectrum Model

		Predicted		
		Housed	Homeless	Percent Correct
Observed	Housed	2010	0	100%
	Homeless	143	4	1.34%

Step Two: Calculating Predictive Scores

Based on the regression model shown above the following equation was used to calculate the individual odds of homelessness for each respondent in the sample data set.

$$\frac{1}{1 + e^{-z}}$$

where z= -3.83 + .34(race/ethnicity) - .04(age) + .46 (HIV status) + 2.08(income) + 1.46(household composition) + 1.01(hard drug use).

Table 28 presents descriptive statistics on the predictive scores for respondents who are currently homeless and those who are not. Figure 20 shows the distribution of scores and illustrates the (generally) higher predictive scores of people who are homeless. It shows why the predictive model does not appear to be very effective. The traditional cutoff score for successful prediction of the outcome variable (dependent variable) is .5, the point at which respondents have better than a fifty/fifty chance of being homeless (Hosmer and Lemeshow, 1989; Norusis, 1991). Only four respondents have predictive scores of .5 or higher.

Table 28
Descriptive Statistics of Individual Predictive Scores for Respondents Who are Currently Homeless Compared to Those Who are Currently Housed

Statistic	Currently Homeless	Currently Housed
Mean	.177	.074
Standard Deviation	.121	.08
Median	.149	.045
Mode	.092	.042
Minimum-Maximum	.005-.637	.001-.484

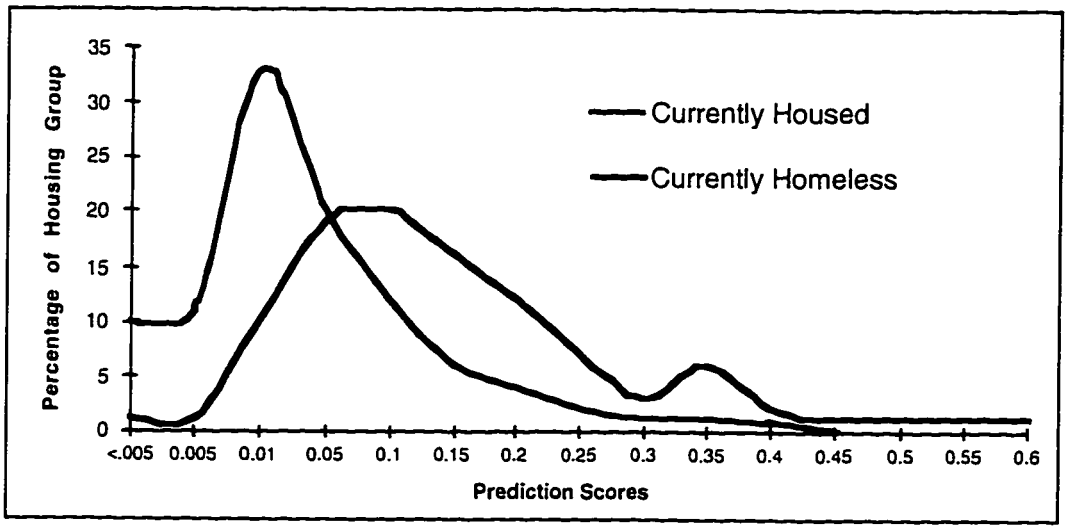

Figure 20 Predictive Scores of Respondents who are Currently Housed and Those who are Currently Homeless

Step Three: Identifying Predictive Score Clusters

In order to construct risk groups, the traditional .50 cutoff criteria was replaced by a less stringent criteria. In order to do this the data were examined for any clustering of odds scores that could serve as delimiters of greater or lesser risk of homelessness (Consultation with UW Biostatistics Department faculty and graduate students, October 14, 1996). Figure 21 shows three somewhat distinctive clusters of predictive scores identified and used for construction of three homelessness risk groups. The break points occur at .021 and at .07 in the distribution of odds scores among those who are currently housed (.001 through .484).

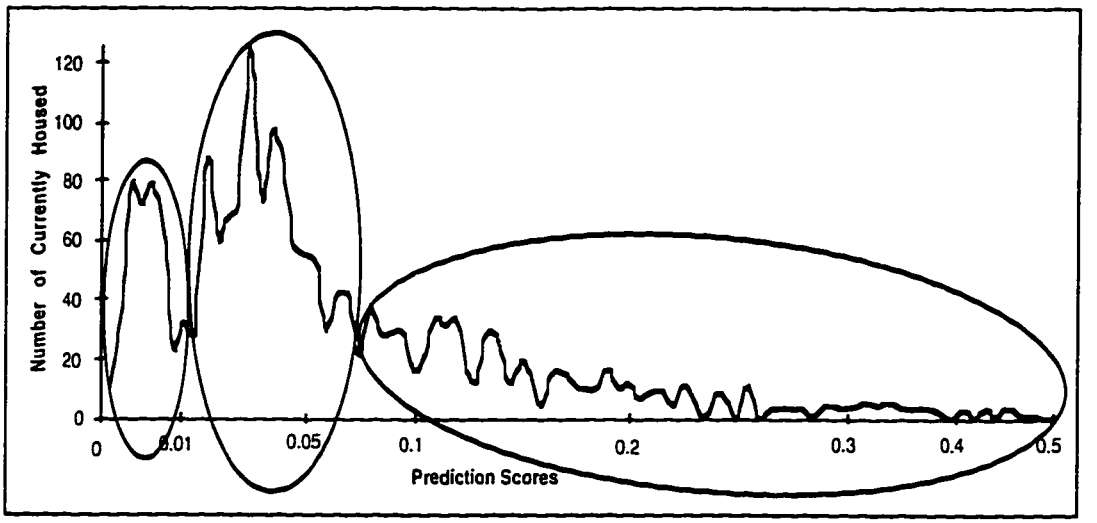

Figure 21 Predictive Scores of Respondents who are Currently Housed with Three Break Points

Step Four: Calculating the Risk Groups

Three risk groups were constructed using these break points and the "previous homelessness variable". The "previous homelessness" variable was not included in the regression model due to the confounded nature it has with current homelessness (it is impossible to know if currently homeless respondents who indicate they have been homeless are referring to their current homelessness or episodes that may have occurred in the past). However, since the construction of risk groups entail only data from respondents who are not currently homeless the "previous homelessness" variable is easier to interpret. Since previous homelessness has been identified in other research as a correlate to current homelessness (Shlay and Rossi, 1992, Toro, et. al., 1995) it is used here to further inform the construction of the homelessness risk spectrum. The Phoenix respondents were not asked if they had ever been homeless so they are not included in this analysis.

The three homelessness risk groups were constructed as follows:

- If respondents' predictive score is less than .021 and they have never been homeless they are placed in a **low risk of homelessness** group.

- If respondents' predictive score is less than .021 but they have been homeless in the past, they are placed in a **moderate risk of homelessness** group.
- If respondents' predictive score is between .021 and .07, and they have never been homeless they are placed in a **moderate risk of homelessness** group.
- If respondents' predictive score is between .021 and .07 but they have been homeless in the past, they are placed in a **high risk of homelessness** group.
- If respondents' predictive score is .07 or greater they are placed in a **high risk of homelessness** group.

Table 29 shows the number and percent of the sample--excluding respondents from Phoenix--who are in the three homelessness risk groups and the number and percent who are currently homeless. It also shows the percentage of respondents from each locale who are in each risk category. It is important to note that the composition of each of the locales is due to differing sampling approaches and not to the demographic epidemiology of the community. For instance, though Washington State and San Bernardino/Riverside Counties have a lower percentage of people at high risk of homelessness and respondents who are currently homeless than do the other locales this does not mean that the two locales enjoy a lower rate of homelessness or risk of homelessness than do the others. Assessing this is beyond the scope of this study and data it utilizes.

Table 29
Number and Percentage of Sample Across the Homelessness Risk Spectrum and Percentage of Locale Respondents in Each Risk Group

Risk Group	Number of Respondents	Percentage of Total	Chicago	Alameda County	Washington State	Riverside/ San Bernardino	Contra Costa County
Low	412	21%	17%	12%	29%	38%	8%
Moderate	483	25%	26%	18%	29%	32%	3%
High	816	42%	44%	53%	40%	28%	76%
Currently Homeless	*235*	*12%*	13%	17%	2%	2%	13%
TOTAL	**1946**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Demographic Composition of Each of the Homelessness Risk Groups

Understanding the composition of each of these general risk groups may assist in assessing the needs that accompany the risk of homeless (for example, the need for substance abuse treatment). It can increase understanding of the groups of people that housing advocates and planners can expect to be most likely to become homeless in the future (women of color, people with histories of incarceration, etc.), and who might be accompanying them (children, partners).

The following figures show the demographic make up of each of the risk groups, the currently homeless, and the entire sample. Figure 22 shows female respondents comprise 24% of the entire subsample (termed "subsample" because Phoenix respondents are not included in these analyses), but make up only 15% percent of the low risk group and 30% of the high risk group. Women comprise 22% of the moderate risk group (χ^2=34.25; p <.0001).

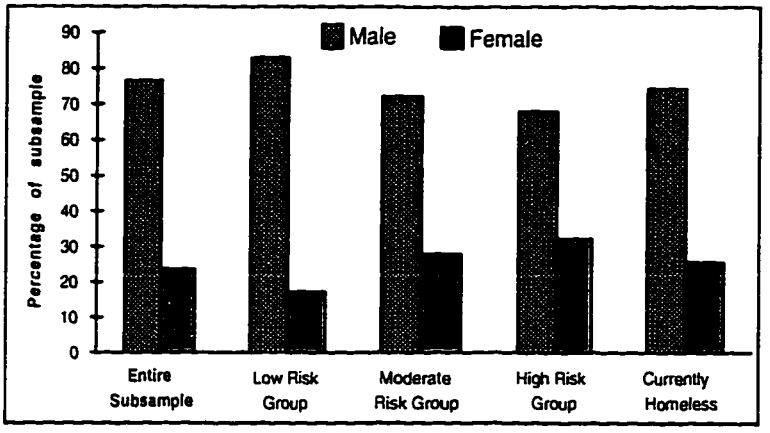

Figure 22 Risk of Homelessness Group by Gender Group

Figure 23 shows that African Americans and Native Americans are underrepresented in the low risk category and over-represented in increasingly higher risk categories. White respondents show an opposite trend. While African Americans comprise 38% of the subsample, they comprise only 14% of the low risk group. They comprise 30% and 50% of the moderate and high risk groups respectively. White respondents comprise 45% of the subsample but comprise 70% of the low risk group, 49% of the moderate risk group and only 32% of the high risk group (X^2=214.12; p <.0001).

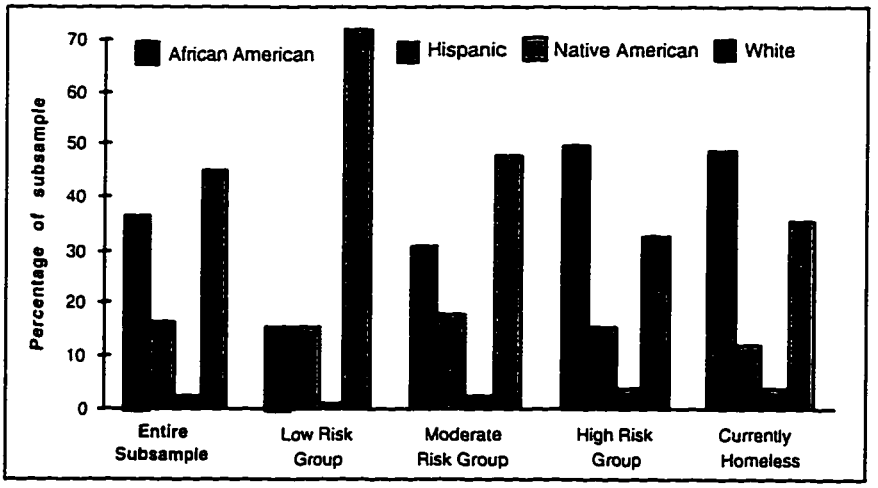

Figure 23 Risk of Homelessness Group by Race/Ethnicity Group

Figure 24 shows that the average age across all respondents is 38.7. The average age of people in the low risk category is 41.9 and a trend downward in age progresses through the risk groups (F=35.80; *p*=.0000).

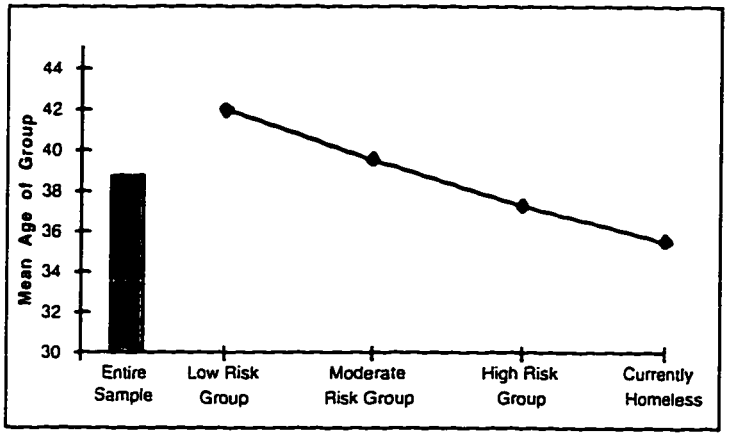

Figure 24 Risk of Homelessness Group by Mean Age of Group

Figure 25 shows that though HIV status is fairly evenly distributed across the entire subsample, people with AIDS are over-represented in the low risk group, comprising nearly half (47%) of that group. People who are HIV+ with symptoms make up 38% of the high risk group though they comprise only 29% of the entire sample (X^2=139.70; p <.0001).

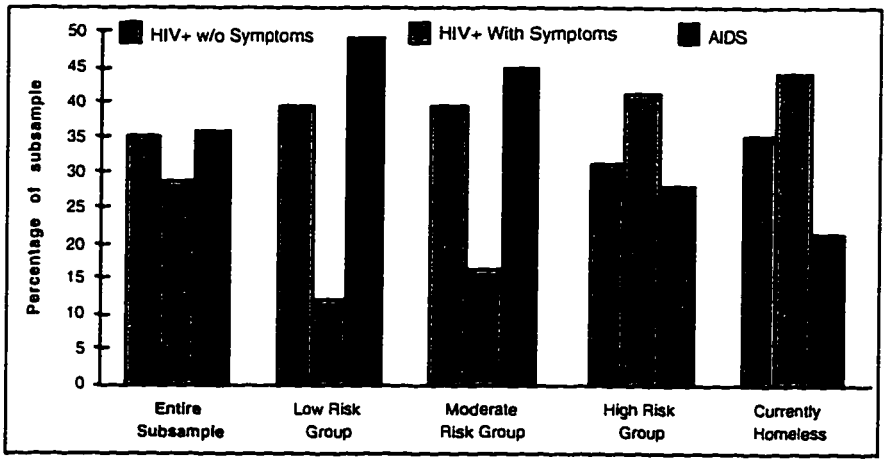

Figure 25 Risk of Homelessness Group by HIV Status

Figure 26 graphically portrays what is intuitively known about income and risk of homelessness. It shows that the vast majority of the respondents in the higher income categories are in the low risk group. In fact, more than 80% of all respondents who earn more than $1,225.00 per month are in the low risk group compared to only 1% of those making less than $667.00. Higher risk groups have increasingly greater proportions of low income people (X^2=1395.1; p <.0001).

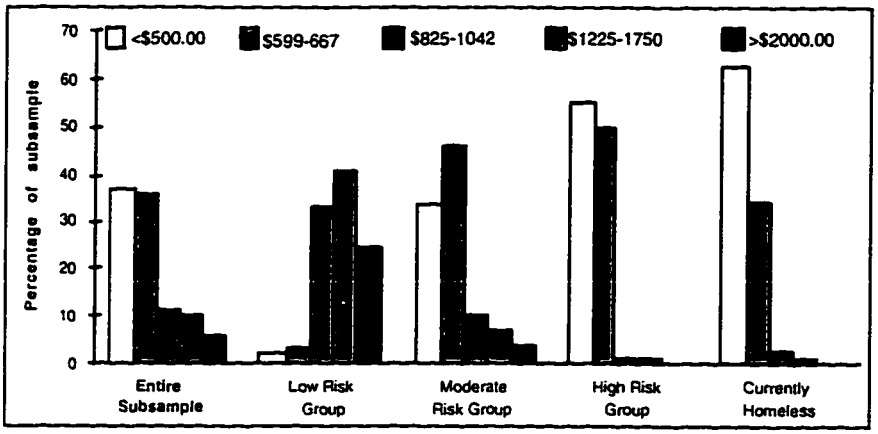

Figure 26 Risk of Homelessness Group by Monthly Income Group

Figure 27 shows that respondents who live with friends or roommates are fairly evenly distributed across all risk groups though somewhat more likely to be in higher risk groups. People who live alone increase from 27% in the low risk group to 41% in the high risk group. People who live with family members are as likely to be in the low risk group as the high risk group (24% of both groups) but most likely to be in the moderate risk category, comprising 38% of that group though they comprise only 26% of the entire subsample.

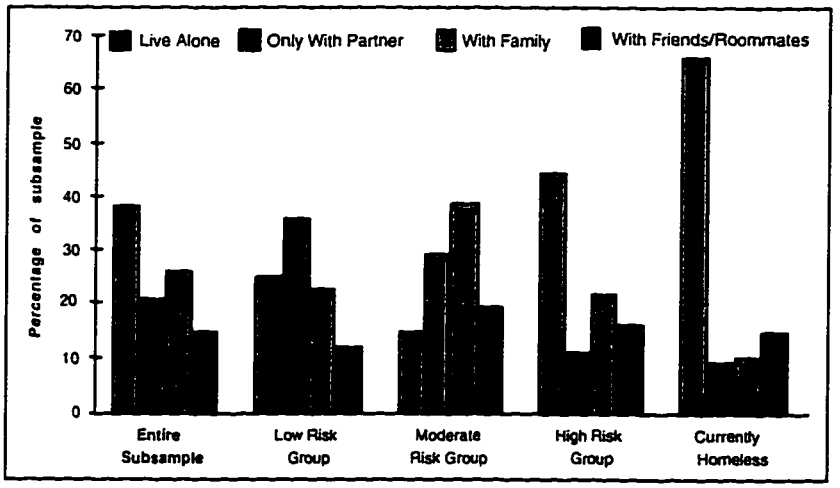

Figure 27 Risk of Homelessness Group by Household Composition

The presence of children in the home mirrors the same trend as those who live with family. In the entire subsample, 17% of respondents report living with children. Only 8% of homeless respondents report having children. Those at moderate risk of homelessness report the highest percentage of

homes that include children, at 21%. Both the low and high risk groups are comprised of 17% with children in the home.

Figure 28 shows both the increase in hard drug use and the increase in previous incarceration as risk groups gain in severity . Only 2% of respondents in the low risk group and 4% in the moderate risk group report using hard drugs while 37% of those in the high risk group report using them. Previous incarceration rates follow a similar trajectory with 6% of those in the low risk category reporting having been in jail or prison to 21% and 44% in the moderate and high risk groups respectively.

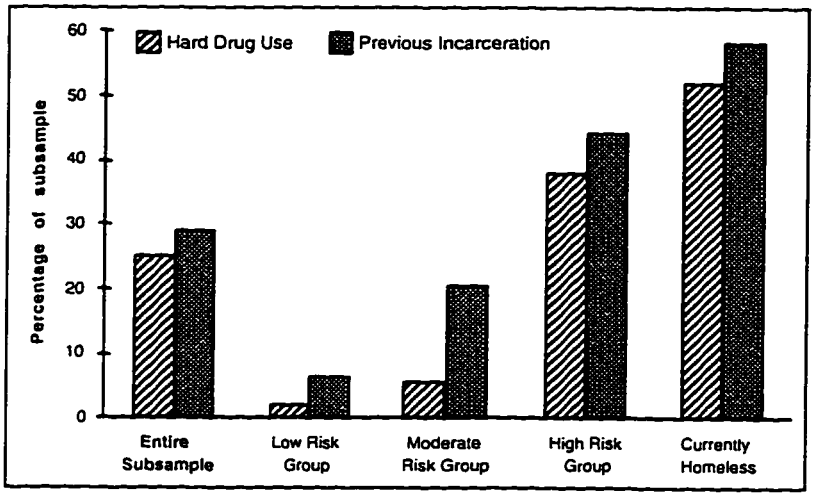

Figure 28 Risk of Homelessness Group by Hard Drug Use and Previous Incarceration

Risk Group Snapshots

This section seeks to pull all of these demographic and behavioral variables together in such a way as to create a profile of respondents in groups across the homelessness risk spectrum. Variables in the sample data set that were not part of the logistic regression are added to provide deeper understanding of the people at low, moderate, and high risk of homelessness.

Low Risk Group Profile

More than half of the sample data set respondents (55%) who are at little to no current risk of becoming homeless are gay or bisexual white men. An additional 15% of the low risk group is comprised of gay or bisexual men of

color. In general, low risk respondents tend to have fewer children living at home (especially true of the white gay/bisexual men). Of these gay/bisexual men, only 5% of the white men and 15% and men of color have children living at home. They use hard drugs at a significantly lower rate than the sample at large. Eleven percent are in substance abuse treatment programs, most of whom are in a 12-step program.

The white men in this group tend to live alone or with a partner and are most likely to have the highest monthly incomes of respondents. About half of them (48%) have an AIDS diagnosis. The men of color are more likely to live alone or with their parents or other family members and have incomes slightly lower than the sample data set at large. They are as likely to be HIV+ without symptoms as to have an AIDS diagnosis. None of the respondents in the low risk group have been homeless in the past.

Fifteen percent of the people at low risk of homelessness in the sample data set are women. More than half (56%) of these women have children under the age of 18 living at home.

Moderate Risk Group Profile

The moderate risk group is far less homogenous than the low risk group. Women comprise a larger proportion of this group (22% compared to only 15% of the low risk group). In fact, female respondents are more likely than male to be in both the moderate and high risk groups. Seventy-three percent of the women in the moderate risk group are women of color, and 44% of the women have children in the home. The majority are raising their children alone. These women at moderate risk of homelessness are most likely to be HIV+ without symptoms. The majority, 80%, make less than an average of $667.00 per month. Only about 5% of the women live alone. About 4% of both women and men in the moderate risk group use hard drugs. More than a quarter of the respondents at moderate risk of homelessness (28%) are in a substance abuse treatment program. Most of these (44%) are in a 12-step program, though 26% are in methadone treatment. Fifteen percent of the respondents in the moderate risk group report having been homeless in the past.

Of the men in the moderate risk group, 45% are men of color. Sixteen percent have children in the home; only 1% is raising children alone. As with women, the majority, 78%, make less than an average of $667.00 per month. Unlike the women in this risk group, the men are more likely to have an AIDS diagnosis than be HIV positive. Seventeen percent of the male respondents live alone.

Respondents in the moderate and high risk categories report engaging in behavior that places themselves and others at seriously increased health risks. In Riverside/San Bernardino and Contra Costa counties respondents were asked if they had ever traded sex for a place to sleep. Seventeen percent of the Riverside/San Bernardino/Contra Costa respondents in the moderate risk category indicated they had.

High Risk Group Profile

Respondents in the high risk group are significantly more likely to use hard drugs than are those in the moderate or low risk groups. More than half (54%) of the women in this risk group use hard drugs, 26% of whom have children under 18 years old living at home. The Centers for Disease Control and Prevention report that nearly half–47%–of all women infected with HIV were exposed through injection drug use. Nearly a third of the men (30%) use hard drugs, 14% of whom have children at home. Thirty-nine percent are in some kind of substance abuse treatment, a third of whom are in methadone treatment. Sixty-eight percent of all respondents–male and female–in the high risk group are people of color (compared to 50% of the entire sample data set). Virtually all make less than an average of $667.00 per month. Both men and women in the high risk group are most likely to be HIV+ with symptoms than HIV+ without symptoms or AIDS diagnosed. Only in this risk group do heterosexuals comprise the largest portion of the group (at the other risk levels men who have sex with men are the largest sexual orientation group).

Thirty percent of the women in the high risk group have children in the home, half of whom are raising them alone, compared to 12% of the men, 8% of whom are raising their children by themselves. Nearly half of the men (46%) live alone while 29% of the women live alone. Sixty-three percent have been homeless in the past.

Forty-two percent of the respondents in the high risk category who were asked if they had ever traded sex for a place to sleep indicated they had. Respondents in the high risk category are significantly more likely to have moved several times in the three years prior to completing the questionnaire than are respondents in either the moderate or low risk categories. Respondents in Alameda and Riverside/San Bernardino Counties were asked if they would have to move if their income decreased by $50.00. Sixty percent of respondents in the high risk group indicated they would, compared to 40% and 18% in the moderate and low risk groups respectively. Table 30 presents a demographic overview of each of the homelessness risk groups.

Table 30
Demographic Profile of Risk Groups

Variable	Value	Risk Group		
		Low n=412	Moderate n=483	High n=816
Race/Ethnicity	% African American	14%	30%	50%
	% Latina/o	15%	19%	15%
	% Native American	1%	2%	2%
	% white	70%	49%	33%
Gender	% Male	85%	78%	70%
	% Female	15%	22%	30%
HIV Status	% HIV+ w/o symptoms	39%	38%	32%
	% HIV+ with symptoms	14%	19%	38%
	% w/ AIDS	47%	43%	30%
Monthly Income	% < $500.00	2%	34%	51%
	% $599-667.00	2%	45%	48%
	% $825-1042.00	33%	12%	1%
	% $1225-1750.00	39%	7%	<1%
	% > $2000.00	24%	3%	0
Sexual Orientation	% MSM	64%	48%	31%
	% bisexual	9%	13%	18%
	% lesbian	<1%	1%	2%
	% heterosexual	27%	38%	48%
Household Composition	% living alone	29%	16%	48%
	% living w/ partner	37%	28%	13%
	% living w/ family	24%	38%	24%
	% living w/ friends	11%	18%	16%
Kids at Home	% with kids	17%	21%	17%
Substance Use	% using alcohol	45%	38%	40%
	% using marijuana	30%	31%	32%
	% using hard drugs	2%	4%	37%
Prison/Jail	% previously incarcerated	6%	21%	44%

As the planning for AIDS housing increasingly focuses on the provision of housing resources to those at greatest risk of homelessness the homelessness risk spectrum can offer clarity about who those people might be. Suggestions for utilization of these findings are presented in the

following chapter. Prior to this, however, additional findings on the housing preferences of respondents are presented. The consideration of housing preferences is important for assuring the maximum utilization of housing by those for whom it is designed. AIDS housing that is designed without information on client preferences can be so unattractive to potential clients as to go unutilized. For instance, congregate housing developed for families may go underutilized as people with children generally prefer to raise their children in non-institutional settings, especially more normalized dispersed housing sites (Sawyer, 1993).

Housing Preferences

This section reports findings on respondents' preferences regarding housing inclusive of all serostatus' and several dyadic housing preferences. It presents the data in an aggregate form for the entire sample data set, then furthers understanding of the importance of examining housing preferences through analysis by a number of the demographic variables presented in previous sections.

Serostatus Inclusive Housing Preferences

Figure 29 shows that respondents are, on average, evenly divided into the three categories of preference regarding housing that includes people who are HIV+ without symptoms, HIV+ with symptoms, and those who have an AIDS diagnosis. Nearly a third like the idea. Slightly more than a third dislike it, and a third are indifferent. However, Figures 30 through 33 show that this even distribution disappears when similar analysis is conducted by gender, ethnicity, HIV status, and sexual orientation.

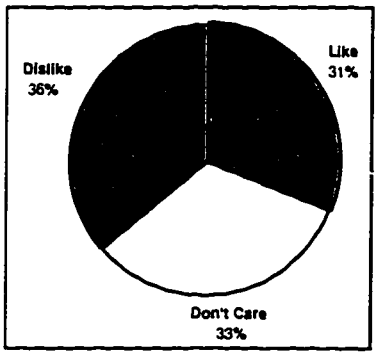

Figure 29 Feelings About Serostatus-Inclusive Housing For Entire Sample

Figure 30 shows that women are notably more likely to have strong opinions about the concept of serostatus inclusive housing than are men. Men are evenly distributed in their preference. But fewer than 20% of women like the idea and almost half dislike it.

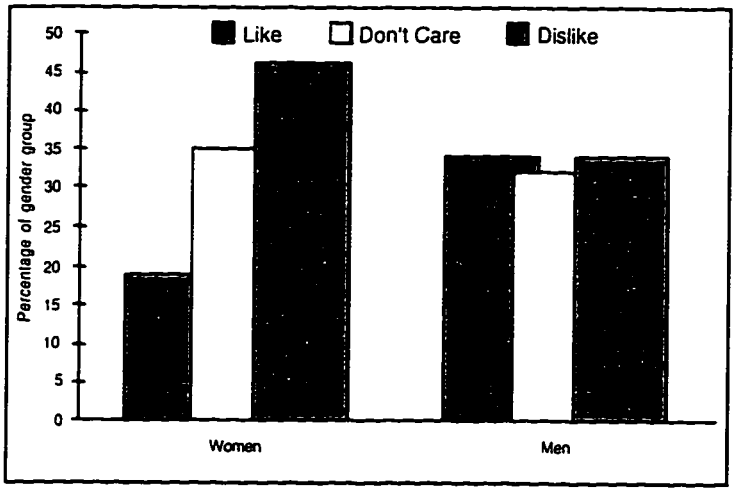

Figure 30 Feelings About Mixed Serostatus Housing By Gender

Figure 31 shows that more Native American and African American respondents dislike than favor a serostatus-inclusive housing setting. Hispanic respondents are evenly split across preferences and more white respondents prefer this housing option than dislike it.

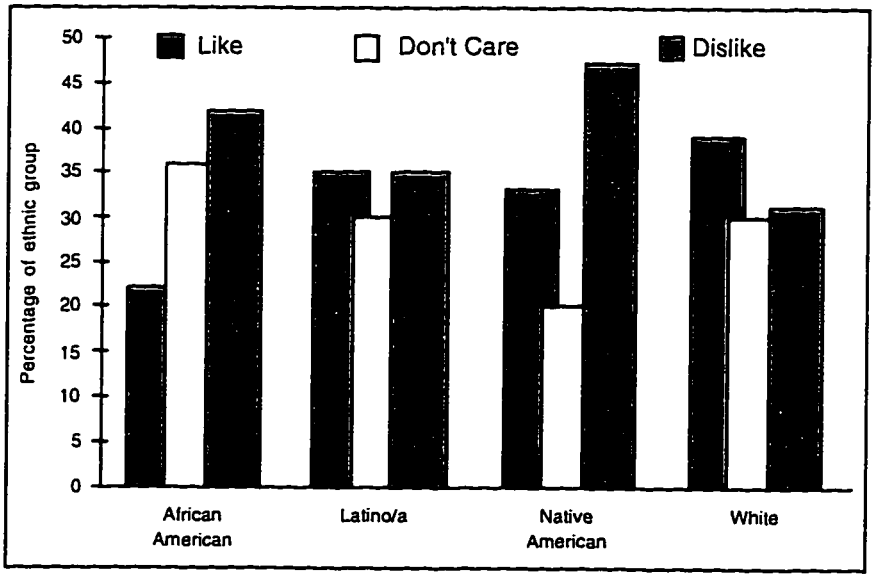

Figure 31 Feelings About Mixed Serostatus Housing by Race/Ethnicity Group

Figure 32 presents interesting differences across HIV status. Respondents who have not yet developed symptoms are evenly split across all preference groups. Among respondents for whom the disease has become symptomatic more dislike (38%) or are indifferent (38%) to serostatus-inclusive housing. An equal percentage of respondents with AIDS dislike the housing option (38%) but fewer are indifferent (29%) and more are in favor of the option.

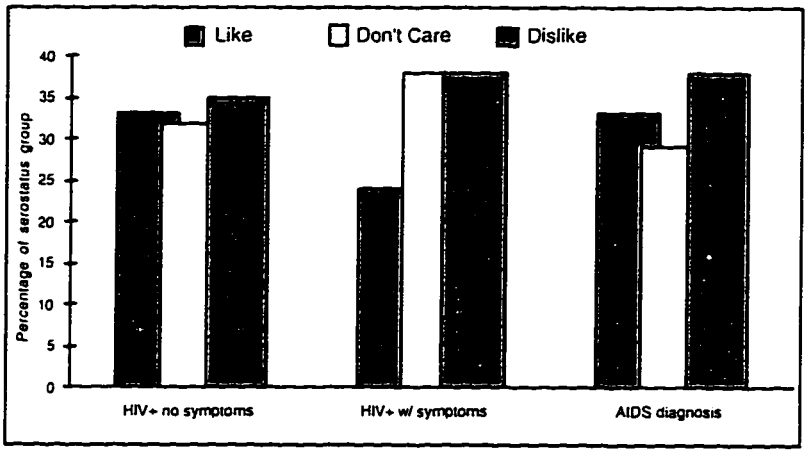

Figure 32 Feelings About Mixed Serostatus Housing By HIV Status

Figure 33 shows that both lesbian respondents and men who have sex with men tend to favor serostatus-inclusive housing. Heterosexual respondents, on the other hand are significantly more likely to disfavor serostatus-inclusive housing. While more bisexual respondents disfavor than favor the housing option they are less polarized than are heterosexual respondents.

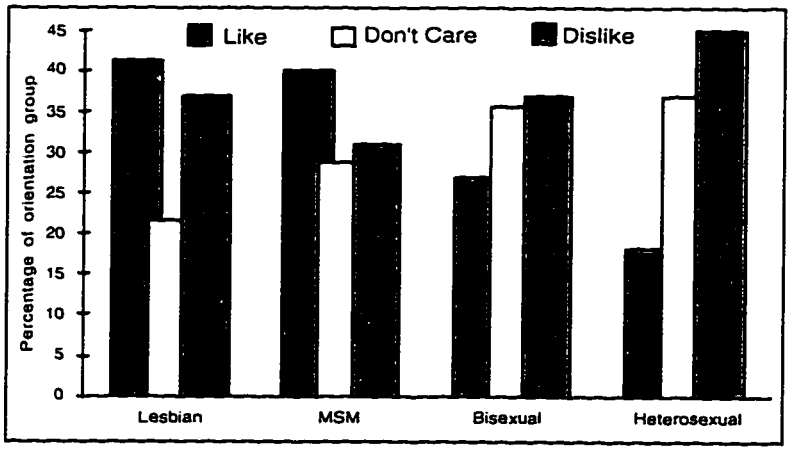

Figure 33 Feelings About Mixed Serostatus Housing By Sexual Orientation

When analysis was conducted to learn if mixed serostatus housing preferences differed by risk group no statistically significant differences were found. Respondents in the low and moderate risk categories were evenly divided across the preference levels. However, respondents in the high risk category were much more likely than the other two risk categories to dislike the concept (39%) than like it (25%). This difference is likely due to the higher percentage of women and people of color in the high risk group than the other groups.

Dyadic Housing Option Preferences

Differing slightly by locale, respondents were presented with a series of forced-choice housing preference dyads. For instance, they were asked to choose between individual living settings versus group living settings, between housing only for people with AIDS versus housing for people with AIDS and other disabilities. This section presents an overview of the findings from these questions. Tables showing the exact percentage of respondents choosing each of the housing preferences, including analysis by a number of demographic variables (including gender, race/ethnicity, presence of children, and risk group) are found in Appendix B.

In Chicago, Phoenix, Alameda and San Bernardino/Riverside Counties respondents were asked if they would prefer to live in their own apartment or in a shared apartment. In general, all respondents prefer to live in their own housing as opposed to shared housing. However, respondents who have children in the home (including greater numbers of heterosexual respondents and women) tend to have greater percentages who prefer their own place than those who do not.

In Chicago and Phoenix respondents were asked if they would prefer to live in a private room in an SRO or in their own bedroom in a shared apartment. A larger percentage of respondents prefer the shared apartment option. Respondents who are now homeless, those who are at high risk of homelessness, and those who live alone are evenly divided between the two options. It is interesting to note that respondents with AIDS are more likely to prefer the shared living situation that those who are HIV+. This difference is maintained throughout the options presented subsequently. Respondents in later stages of the illness are less likely to want

to live alone than those in earlier stages. This may *partially* explain why men who have sex with men are more likely to prefer shared living options than are heterosexual or bisexual respondents. Men who have sex with men in the sample data set, are more likely to be in later stages of the disease.

Respondents in San Bernardino/Riverside and Alameda Counties were asked if they would prefer to move in order to have their own apartment or stay in their current neighborhood and share housing. With few exceptions respondents are evenly divided between the two options. There are some notable differences including the differences across race/ethnic groups. African American respondents are more likely to want to move in order to have their own place while Native American and white respondents are likely to want to stay and share housing. Men who have sex with men are again significantly more likely to want to share housing than are heterosexual respondents.

In Chicago, Phoenix, Alameda and San Bernardino/Riverside Counties respondents were asked if they would prefer to live in their own room in a group house or in a private room in a Single Room Occupancy hotel (SRO). In general, respondents prefer the shared living situation. However, as has been noted before, men who have sex with men are much more likely to prefer shared living than are heterosexual respondents. This probably explains a gender difference in preferences here as well: women are more likely to prefer a private living space. Perhaps the most interesting group differences are those across the risk groups. People at low risk of homelessness are much more likely to prefer their own room in a group house than are those at moderate and high risk of homelessness, nearly half (46%) of whom prefer the SRO option compared to only 24% of those at low risk of homelessness.

In Chicago and Phoenix respondents were asked if they would prefer to live in housing only for people with AIDS or in housing for people with AIDS as well as people with other disabilities. Respondents generally prefer the option of living with people who have a diversity of disabilities rather than limited to just HIV disease. In fact, all demographic groups within the data set prefer this option. There are some interesting differences in degree, however. Probably reflecting the same people, significantly fewer men

who have sex with men and fewer white respondents prefer this option than do heterosexual and African American respondents.

Respondents in San Bernardino/Riverside and Alameda Counties were asked if they would prefer to live in housing just for people with AIDS or in housing for people with AIDS as well as other low income people. This is one of the most interesting dyadic options in the series. On average the sample is split exactly in half on their preferences here. However, there is more difference across groups on this dyad than any other. The defining factor is almost certainly income level of the respondent. An examination of each of the demographic groups (except for HIV status) shows that those with lower incomes (women, people of color (especially African Americans), homeless respondents, people at higher risk of homelessness, people who live alone, people with children, and heterosexuals) all prefer the mixed housing option. Those whose incomes are higher (men, white respondents, respondents who are not homeless and are at low risk of becoming homeless, those who live with a partner, those without children in the home, and men who have sex with men) all prefer housing only for people with AIDS and do not prefer to live with other low income people.

In Chicago, Phoenix, Alameda and San Bernardino/Riverside Counties respondents were asked if they would prefer to live in a group living situation with on-site services or in their own apartment with occasional in-home support services. Respondents are largely of one mind here: they would much prefer living in their own apartment with occasional assistance to a group house with on-site service.

In San Bernardino/Riverside and Alameda Counties respondents were asked if they would prefer to live in a group house with on-site services or in their own apartment and have occasional in-home support services. Respondents are almost evenly divided across the two options with a slight preference for living with friends or family. It's interesting to note some exceptions to that, however. It appears that people who may be particularly isolated or disenfranchised, such as the homeless and others who live alone, are more likely to want to live in a group house than with friends/family.

Knowledge about potential publicly-funded housing clients (those people at highest risk of homelessness) and their housing preferences can be used to focus housing advocacy, policy, site development, and related services in ways that are most responsive to clients' needs. The following chapter summarizes these findings and discusses their implications for social welfare policy, social work practice, and research.

Chapter 5
Discussion Of Findings

This chapter presents a summary of the findings presented in Chapter Four. It reviews the implications of the findings presented there, discussing the limitations of the study and the degree to which it can be used to make assumptions about the larger population of people living with HIV disease. It discusses the ramifications of the composition of the group of respondents who appear to be at highest risk of homelessness for housing policy, program development, and service provision. Finally, in light of the exploratory nature of this research, several suggestions are made for future research in order to generate knowledge about the people at greatest risk of homelessness and the systems that might be most responsive to their needs.

Summary of Findings

The data set used in this research was analyzed to learn more about factors that place people with HIV/AIDS at risk of homelessness. It is comprised of information from 2,864 people living with HIV disease from Alameda , Riverside, San Bernardino, and Contra Costa Counties in California, Chicago, Washington State, and Phoenix. The sample data set is comprised of a mix of urban , suburban, and rural respondents.

Slightly more than half of the respondents are people of color, about a quarter are women. This is particularly salient as it is in these two groups that the rate of the disease is accelerating in the United States. The majority of the sample data set respondents are very poor: 72% make less than an average of $667.00 per month. This is also important as poor people are more likely to contract HIV disease than are people in middle or upper income groups, and, of course, they alone are eligible for public housing funds (when home mortgage tax breaks are not considered public assistance).

There is even representation of men who have sex with men (41% of the sample) and heterosexual respondents (42%). A smaller percentage of respondents are bisexual (15%) or lesbian (2%).

A relatively small percentage of the sample data set (8.2%, n=235) are currently homeless. Respondents who are currently homeless were more likely to be people of color and are slightly younger than those who are currently housed. They are equally as likely to be women as men, a significant departure from the demography of the homeless population at large. They are much more likely to be heterosexual, bisexual, or lesbian than gay male. The largest portion of the currently homeless are HIV+ with symptoms, while those who are not homeless are more likely to have an AIDS diagnosis or be HIV+ without symptoms.

Perhaps that which distinguished the currently homeless from those who are not homeless is hard drug use and history of incarceration. Fully 40% of the currently homeless report using cocaine, heroin, or crack, while only 15% of those who are not homeless report using these hard drugs. While 23% of the homeless reported having been in prison or jail in the past, only 12% of those who are currently housed report past incarceration.

Logistic regression analysis was used to understand which variables available in the sample data set increased respondents' odds of homeless. Of the 2,864 cases in the sample data set, 2,025 had non-missing data on each of the independent variables that were present in locale-specific surveys comprising the larger sample data set. Extreme poverty--earning less than an average of $667.00 a month, housing composition--especially living alone, and the use of hard drugs all more than double the odds of homelessness among sample data set respondents. Extreme poverty appears to play the greatest role in differentiating sample data set respondents who are homeless from those who are not homeless, increasing the odds of homelessness by 6.8. Those living alone have odds of 4.3 of being homeless while respondents using hard drugs have a 2.7 odds of being homeless.

African Americans and Native Americans in the sample have nearly double the odds of being homeless than that of white and Hispanic respondents (odds increase=1.8). Respondents who are HIV+ and symptomatic have slightly increased odds of being homeless (odds increase=1.3).

The presence of children in the home appears to be something of a protective factor against homelessness. Respondents who do not have children in the home have twice the odds of being homeless as those who do not. While respondents' age itself does not increase the odds of homelessness it does appear to be confounded with other variables in the model.

When a variable describing respondents' sexual orientation was added to the model 1,606 cases had non-missing data. The addition of the sexual orientation variable changed the model somewhat. While extreme poverty, household composition, and hard drug use contribute the most to an increase in the odds of homelessness, HIV status, ethnicity, and age do not significantly increase the odds ratio of homelessness among this sample of respondents. Sexual orientation had a significant impact on the odds of being homeless with respondents who are heterosexual, bisexual, or lesbian having an odds increase of 2.7 over men who have sex with men.

When a variable measuring whether or not respondents' had ever been incarcerated was added to the previous model 1,185 cases had non-missing data and were included in the analysis. This model included only respondents from Chicago and Riverside/San Bernardino Counties. In this sample, extreme poverty, household composition, and hard drug use again contribute the greatest increases in the odds ratio. In addition, HIV status (specifically symptomatic HIV+ status) nearly doubles the odds ratio (odds increase=1.8) as does previous incarceration (odds increase=1.8). The presence of children in the households of respondents in this sample does not appear to significantly impact the odds of homelessness.

In summary, extreme poverty, hard drug use, and living alone appear to consistently increase the likelihood of homelessness among sample data set respondents regardless of the presence of other explanatory variables. Other variables that appear to increase the likelihood of homelessness among some respondents are race/ethnicity, especially African American race/ethnicity, history of incarceration, and symptomatic HIV disease prior to an AIDS diagnosis. The presence of children in the home appears to be something of a protective factor for homelessness as does a gay male sexual orientation, though this is a bit more difficult to interpret.

Given the kinds of the variables that appear to most significantly increase the likelihood of homelessness, that is, both demographic (income) and behavioral (hard drug use), it is interesting to reflect on the earlier discussion of the causes of homelessness (Chapter 2), especially among people with HIV disease. These findings tend to support hypotheses that homelessness cannot be attributed solely to systemic causes nor solely to personal behaviors, but instead that they are related and difficult to disentangle. Unfortunately, in this study as in most other studies of homeless people, it is impossible to know which came first, homelessness, poverty, or drug use. However, it is likely that *drug use and homelessness* are symptomatic of larger systemic precursors such as underemployment, inequitable opportunities across race/ethnic groups, genders, and class groups because of their higher prevalence among low income and respondents of color, especially women of color. Clearly, these alone are not adequate to explain why some respondents are homeless and others are not. Such causal considerations cannot be determined by this study and are better answered by longitudinal studies that include a much richer pool of explanatory variables.

Another question of interest raised by the explanatory models is that of the impact of HIV disease itself among those who are homeless or intermittently homeless. Here again, this study suffers from a lack of longitudinal data. It is impossible to know what percentage of the homeless respondents became homeless because of their illness or if, in fact, HIV disease is largely inconsequential to their current homeless situation (especially for those who are asymptomatic). There are likely many people in this study for whom having HIV disease is only one of many crises in their lives, or even a function of being homeless. This is a particularly salient issue in the AIDS service community where many service providers question whether it is their role to house the homeless simply because they have HIV disease, when those in need of housing may have been homeless long before contracting the illness.

While it is possible, though challenging, to determine temporal ordering of homelessness and HIV infection, the issue this raises seems largely ethical rather than empirical. It is an issue of service delivery, resource allocation, and the timeless social welfare dilemma of serving the "worthy and

unworthy poor". AIDS service and housing providers must challenge professionally unethical efforts to determine who is worthy of housing and service resources based on infection route and/or lifestyle.

A Homelessness Risk Spectrum

From the initial logistic regression analysis a homelessness risk spectrum was constructed that placed respondents in one of three risk levels: low, moderate, and high. In order to take into account the high correlation between a history of homelessness and future homelessness, respondents' previous homelessness was added to the mechanism by which respondents were assigned to risk categories. Approximately half of all respondents included in the risk spectrum analysis fell into the high risk group (n=816; 48%). The remaining respondents were split fairly evenly between the low risk group (n=412; 24%) and the moderate risk group (n=483; 28%).

Low risk group members were characterized by the highest incomes of the sample respondents. Respondents who live with just a partner comprised the largest portion of the low risk category, followed by those who live alone. White male respondents who have sex with men (MSM) or sex with both men and women (bisexual) comprised the largest portion of this risk group. They have very low usage of hard drugs (including cocaine, heroin, and crack) and only 11% indicate being in some form of substance abuse treatment program. Few have been in jail or prison in the past. Nearly half of the respondents in the low risk for homelessness category have an AIDS diagnosis.

Moderate risk for homelessness group members are less homogeneous. However, they can be distinguished from the low and high risk group members as having larger families, including families with children. The largest group of respondents (38%) are living with either their own nuclear family or with parents or extended family. Only 16% of those at moderate risk are living alone. Like those at low risk of homelessness, respondents at moderate risk have low levels of hard drug use, though significantly more (28%) are in some kind of substance abuse treatment program, indicating a history of substance abuse, and, in some cases, current use. A fifth of the respondents at moderate risk of homelessness have a history of

incarceration. Fifteen percent have been homeless in the past. They are as likely to be people of color as white and more likely to be heterosexual, bisexual, or lesbian. They are more likely to be in the earlier stages of HIV disease than are those at low risk of homelessness.

Respondents at high risk of homelessness are characterized by a high percentage of hard drug use–37% of respondents, with 39% in treatment, and previous incarceration (44% of respondents). Forty-eight percent live alone (most of these are male respondents), though fully 17% (mostly women) have children living in their home. All have incomes of $667.00 or less per month. Almost half (48%) of high risk respondents are heterosexual; 31% are men who have sex with men. Women comprise a greater percentage of the high risk category than other risk groups and the women in the high risk group are more likely to use hard drugs than are the male respondents. There is a higher percentage of African Americans in the high risk group than in other risk groups (50% in the high risk group compared to 14% and 30% at low and moderate risk). Nearly 2/3 of the respondents in this high risk group (63%) have been homeless in the past.

In summary, the respondents in this study most likely to be at highest risk for homelessness are people with many personal challenges and behaviors that place themselves and, in some cases, others in health and life-threatening situations. They are very poor people likely moving in and out of homelessness, many of whom live with an addiction to one and probably multiple drugs. In tandem with that addiction some are likely to be engaged in criminal behaviors, including sex trading. While many could probably be considered social isolates, living alone and isolated from friends and family, a sizable minority live with their children.

The reality of the tendency for HIV-infected people at greatest risk of homelessness to be on the outskirts of mainstream society has profound implications on recommendations for addressing their needs. Homosexuals, drug addicts, prostitutes, and people who parlay in a variety of underground economies are not considered worthy of assistance in a society that embraces the myths of merit and choice. Coupled with its insistence upon *personal responsibility* rather than *community responsibility*, the current socio-political environment in the US makes rallying support and

resources for those outside the mainstream is (personally and professionally) difficult for service providers and service advocates. Yet the needs remain and they have significant ramifications for the individuals they impact and for the health and safety of the wider public.

Prior to discussing the implications of the these findings for AIDS housing policy development, services related to AIDS housing, and further research in the area it is important to explore exactly how these data can and cannot be used. There are several limitations inherent in the data themselves and the analysis used that should temper any enthusiasm for making broad statements about what the data teach us about people with HIV who are at greatest risk of homelessness.

Limitations of the Study

Several limitations to the inferential ability of the findings from this study must be explicated in order to sound a cautionary message about the study. For example, primary limitations include non-random sampling approaches used across locales, the differential sampling approaches by locale, the use of needs assessment data for this type of research, and inadequate explication of an explanatory model for homelessness. These limitations underscore the descriptive, exploratory nature of this research. Each is detailed below and their implications discussed.

The Implications of the Convenience Sample

Due to the non-random nature of the sampling approaches used in each of the locales contributing data to this study, the sample data set cannot be assumed to be representative of the larger population of those infected with HIV in the United States. It is inappropriate to make assumptions about that larger population based on the data used in this research. This limits the study considerably. Rather than serving as a representative sample of the larger infected community and therefore one that would allow for assumptions to be made about the larger community, the research can only be a descriptive study of a convenience sample, albeit large and diverse, of selected individuals with HIV/AIDS, from selected communities in the United States (themselves comprising a convenience sample).

It could be argued, however, that a random sample of the population of HIV/AIDS-infected people would be impossible to construct. Since the population of people who are HIV+ is unknown and therefore unavailable, it is impossible to assure that everyone who is HIV+ has an equal opportunity to be selected to be in a sample. The construction of a truly random sample of people living with HIV disease is, therefore, not possible and construction of a truly randomly selected sample of people living with AIDS would be so difficult as to be impractical for most research endeavors [18].

Analyses presented at the beginning of Chapter IV show that with a few exceptions, the sample data set fairly well matches the national demographic epidemiology of people with AIDS and the known pool of people who are HIV+ in the United States. The variability of the demography of people living with HIV disease by differing regions of the United States makes construction of a closely matched sample difficult without sampling by region. Given these challenges to representative sample construction in the HIV/AIDS field, the sample data set may be a good effort at representation.

In the absence of the ability to construct random samples in public housing-related research with people with HIV disease a case can be made for purposive sampling of those suspected of being at greatest need of publicly-funded housing assistance (the homeless, those already using housing assistance, the impoverished, etc.), as was the case in the local data sets that comprise this study. This approach is especially acceptable in needs assessment research (Witkin & Altschuld, 1995).

This, however, presents another limitation of the study. The data used in this research were originally collected as needs assessment data and were not collected for the purpose of conducting analyses necessary to construct risk groups or predict homelessness. The absence of a random sample, and the implications of this for any inferential statistical analyses is a fundamental limitation of this type of research.

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[18] The Centers for Disease Control and Prevention do conduct survey research in which all known people with AIDS are invited to participate. Participation by those at highest risk of homelessness, or the currently homeless, is likely limited due to a number of barriers to the participation of marginalized people, not the least of which is self-selection bias.

Inadequate Explication of an Explanatory Model

There are several key variables that are not available for analyses in this study. A few of these unexplicated variables include more clarity about history of homelessness, information on history of mobility, eviction, and other housing-related variables, information about social support networks, medical condition, mental health status, greater detail about alcohol and drug use/abuse, incarceration, and other behavioral variables.

There are several problems with the variables that are explicated. First, as discussed in Chapter III, the differential approaches to gathering income data across locales made for less than ideal construction of that variable for this research. Data on household income as well as individual income would greatly strengthen this, and similar, studies.

Second, variables describing alcohol use and marijuana use did not include quantity or frequency measurement, making it difficult to understand the severity and impact of their use. Likewise, information on heroin, crack, and cocaine, such as frequency, quantity, and use history would be valuable, as would information on the use of other drugs, especially crystal meth and other "new" drugs that are growing in use and may have particular impact on high risk sexual behaviors.

A third problem relates to the variable describing previous incarceration. More information would lend greater interpretability of incarceration data. Particularly helpful would be differentiation between felony and misdemeanor criminal activity, number of incarcerations, and time since last incarceration.

Finally, more specific definition of "past homelessness" is necessary to truly understand the impact of one's homelessness history. For instance, being homeless and living on the streets due to lack of income, social supports, and the presence of a drug addiction is qualitatively different from being homeless when moving to a new town before acquiring one's own housing. Data in the present study do not make important distinctions such as this.

Limitations of Logistic Regression Analyses

Logistic regression analyses are very sensitive to the data set in which they are used (Hosmer and Lemeshow, 1989) . The models constructed from the regression analyses conducted in this study may not fit other samples. This further limits the use of this research as representative of the larger population of people with HIV disease. However, the construction of several models with different subsets of respondents in this research shows that a few of the predictor variables (income, hard drug use, and household composition) persist in differentiating homelessness from non-homelessness across all subsets.

Due to regional differences in the demography of people living with HIV/AIDS, it is important to use local data for housing and service planning. The use of a nation-wide, randomly selected sample of people with HIV/AIDS would not necessarily be appropriate for planning in Atlanta, Portland, Detroit, San Antonio, San Diego, or Denver. This is all the more so true for the sample data set used in this research. It is regionally limited. And it is a convenience sample. The findings from its analysis should not be used to make policy or plan housing beyond the areas represented in these samples.

The strengths of the sample data set are its size and the diversity of respondents and communities it represents. While this research cannot be used for local housing planning, it can serve as an exemplar, both in the analysis approach and in the findings.

For instance, local communities that collect local data should compare their data to the epidemiological profile of people with HIV/AIDS in their communities to assure they have sampled well in the absence of random selection. Analyses that increase knowledge about the respondents most at risk of homelessness, including those who are currently homeless, is important for the development of appropriate housing. Learning as much as possible about the respondents most likely to become homeless may increase the probability of preventing homelessness among them.

When coupled with other research, the findings from this study, can also be used as an exemplar. Throughout logistic regression and other analyses of this diverse sample, poverty, social isolation (living alone), and hard drug use consistently emerge as variables that significantly increase the odds of homelessness among people living with HIV disease. These are findings that are in line with other social research on homelessness and on people with HIV disease, and should inform AIDS housing planning, regardless of location. Some the ways in which these findings might inform policy, practice, and future research planning follow.

Implications of the Findings for Social Policy Development

Findings from this research have implications for policies ranging from those that determine if and what kinds of housing is built in this country to those that guide service delivery. This section attempts to identify those policies upon which social workers may have the greatest impact.

Commitment to Increased Public and Private Low Cost Housing

Policies that invigorate the consistent development of affordable housing for all low income people may do more to increase the quality of life for high risk people with HIV disease than any other policy or service recommended here. Given the power of safe, stable housing to increase healthy functioning and the accessing of a variety of other resources, for many people a home may be all that is needed to facilitate their engagement in support services.

There is debate as to whether the government or private investors and developers should shoulder the responsibility for providing affordable housing for low income people. In reality, to address the huge gap between the number of low income renters and low cost dwellings both public and private investment will be necessary. Programs that provide tax incentives to low-cost housing developers should be fully supported by social workers. However, policies that invigorate and govern private development of low-cost housing should entail long term use restrictions. For instance, low-cost housing owners that receive government subsidies should be required to preserve *and maintain* the housing for as long is economically feasible. When privately owned, publicly subsidized low-cost

housing units are sold or converted to other uses, a portion of any windfall profits should be reinvested toward the replacement of affordable housing units for low income people.

In order to assure the consistent development of public housing for low-income citizens the social work profession should lobby for the institutionalization of a consistent funding mechanism. Reliance on the changing political environment for low-cost housing initiatives and funding results in an inconsistent and insufficient supply of housing. A national low-cost housing trust fund dedicated to developing an array of affordable housing options could be funded by decreasing the housing assistance given to upper income home owners through mortgage exemptions.

Finally, funding to HOPWA (Housing Opportunities for People with AIDS), the Ryan White Care Act, and other federal and state funding streams available to AIDS housing providers should increase commensurate with infection rates *among America's low income people*. Currently, funding is tied to the political ebb and flow of congressional will . As HIV disease becomes increasingly prevalent in lower income communities (with little political power) and decreases in upper income communities (with greater political power), not only should funding streams not be tied to congressional will, they should not be tied to overall infection rates. Funding levels should be tied to infection rates among the most vulnerable populations.

Public Housing Policy and Drug Use

People actively using illicit drugs have been excluded from public (and private) housing settings by policies designed to provide safe, publicly acceptable housing for low income people. AIDS housing that is targeted toward the most likely to be homeless confront this as a significant dilemma with increasing frequency and difficulty.

Providing a "clean and sober" environment is probably a preferred model for housing drug-addicted low income people, by both the majority of the larger community and by residents. Housing with abstinence policies would likely need to provide treatment and aftercare services for residents. However, some addicts are not willing to be abstinent and many who are

struggle with recidivism. Currently, AIDS housing professionals are struggling with the responsibility, to both the user and the wider community, to prevent those who are chemically addicted from living on the streets and engaging in the high risk behaviors characteristic of street life.

In response, harm reduction models of housing are being considered and in some cases implemented. These models are tolerant of drug use and encourage users to identify and alleviate aspects of drug use that place themselves and others at risk of harm (e.g., the spread of HIV disease through the use of shared needles or unprotected sexual intercourse).

Proponents of harm reduction models suggest that they are the only way to reach and meet the needs of the highest risk people (Des Jarlais, 1995; Erickson, 1995; Single, 1995). Indeed, addictions to substances such as crystal meth, crack, crank, and heroin are so insidious that requiring strict, on-going abstinence to maintain housing is probably unrealistic for successfully housing many people. While compassion for people addicted to drugs may be in short supply, the public health issues related to the presence of active drugs users infected with HIV disease living and working on the streets are compelling reasons to extend the degree to which housing providers are willing to go in order to keep people off the streets.

Thoughtful opponents of harm reduction models question the efficacy of the model for all addicts (Erickson, 1995). For instance, while harm reduction models have been utilized successfully with people in late stages of alcohol addiction (Marlatt, 1994), questions arise as to the portability of the model for users of hard drugs, especially amphetamines such as crystal meth. The financial burden related to illicit drug addiction usually correlates with criminal behaviors such as trading sex for money or drugs, dealing, property crimes, etc. These activities often place nearby residents in significant danger, if not fear of danger. In addition, harm reduction models preclude the supportive nature of the clean and sober environment.

While there are very strong opinions on either side of harm reduction models in housing, we have virtually no empirical information about the models to inform related housing policy decisions. Policies that allow for pilot projects featuring harm-reduction models should also mandate rigorous evaluation components measuring the impact of the model on

residents as well as wider community members. Harm reduction approaches are relatively new in our society. For the most part they are untested and they pose challenges to prevailing knowledge about addiction, recovery, and drug use. However, they also pose an opportunity to expand our knowledge of effective service, treatment, and public health models. They should be pursued with all the attention, resources, and rigor of the experimental drug tests so prevalent in the HIV/AIDS medical field today.

Site-Based vs. Off-Site Services

Skills-training, problem-solving, chemical dependency treatment and other therapeutic services may best be offered on-site for some people living with HIV disease, particularly those who deal simultaneously with mental illness, chemical addiction, social isolation, and advanced stages of HIV disease. Off-site case managers can only be accessed by clients on a limited basis and many clients resist having a case manager. In order to increase client engagement in services, housing sites may do well to offer clients access to social workers on the premises and on a drop-in basis. Similarly, offering treatment services and aftercare services on site may increase engagement in services, decrease recidivism, and strengthen clean and sober social support networks.

For others with HIV disease, perhaps especially those with families, more normalized housing settings may be appropriate (and utilized at increased levels). When asked about on-site services, many people living with HIV/AIDS have suggested that they would prefer to access treatment services off site. They report that site-based service housing limited the development of a home-like atmosphere and was too institutional for the development of a rich family and community life (Sawyer, 1993). In his report on focus group data from people living with HIV/AIDS in New York City, Sawyer reports that participants

> "talked about the need to limit the amount of services provided on-site to enhance the normalization of their homes. Specifically, it was mentioned that services that are in some way related to family life, or contribute to the ability of the family or household to function would be appropriate for in-home delivery. This could include such things as trainings in the area of daily living skills (e.g., nutrition classes, cooking classes, etc.) or services that contribute to the

> independence and functioning of the family (e.g., family counseling sessions and child care)...The primary reason given (for non-institutional-style housing)was the desire to limit the exposure of their children to the programs provided to parents, to normalize their home life, and to limit stigmatization and embarrassment"(p. 93).

This seems to be demonstrated in this study in which more respondents with children prefer their own living space as opposed to a shared living situation and prefer housing options that include people with AIDS and other low-income people over housing only for people with AIDS.

Housing policies, their related funding streams, and community-based decision-making mechanisms that enable communities to create AIDS housing to match the populations living with HIV disease are essential for providing housing that gets utilized. For instance, flexibility to utilize existing scattered-site dwellings, or provide Section 8 housing vouchers that travel with clients, or develop program-based dwellings with on-site services appropriate for the needs of clients are important in meeting the needs of this very heterogeneous client population.

System Integration

One of the greatest barriers to service among people with HIV/AIDS is the copious, sophisticated navigation of bureaucratic service delivery systems necessary to access medical care, mental health care, chemical dependency treatment, child welfare services, hospice, burial and other end of life benefits, etc. This is particularly true among people with HIV/AIDS disease who experience multiple layers of comorbidity such as chemical dependency, compromised physical health, mental illness, and criminal behavior. Increased utilization of case managers has assisted people with HIV/AIDS in accessing a variety of services from large, discrete service systems (Fleishman, 1990; Sonsel, et. al., 1988). However, policies designed to facilitate "one stop shopping" or "wrap-around service" mechanisms by which people with HIV disease can access the variety of services they need could help assure continuity of easy access to services regardless of the availability of case management services and personnel. Currently discrete systems, each with their own application processes, personnel, and service requirements can promote fragmented care and alienation among people with HIV/AIDS, many of whom have mobility problems

and/or previously-developed mistrust of large service systems. "Wrap-around services" increasingly popular in family and child welfare services (Family Resource Coalition, 1996; MacDonald, 1994) may serve other people, specifically people with HIV/AIDS, who rely upon a variety of resources for healthy functioning.

Continuity of Care

Flexible systems that allow clients to enter, exit, and re-enter service systems with little difficulty may be especially important for people with HIV/AIDS at high risk of homelessness. This entails an uncharacteristic bureaucratic commitment to people who recidivate or decompensate and leave formal systems on a regular basis. Many people with HIV disease at high risk of homelessness engage in several high risk behaviors, some of which are illegal and others of which repel and even harm others. They still require care and services, even if it's only to assure the health of the public at large. The more consistent and easily accessed, the more likely the care will be accessed and subsequently, the more effective the care. Policies that limit service requirements, simplify application processes, especially for consumers who are not first-time clients, and are tolerant of recidivating and unstable clients will help to increase the effectiveness AIDS housing and related care services.

Implications of the Findings for Social Work Practice

Social workers across the micro-mezzo-macro spectrum of practice all have a role to play in the provision of AIDS housing resources. This section presents recommendations for social work practice in each of these three areas.

Prior to addressing these specific areas, however, an over-arching dynamic of importance at all levels of social work endeavors surrounding AIDS housing requires primary attention. As this research illustrates, there are immense cultural differences among people in the United States living with HIV disease. There are cultural differences across racial/ethnic groups (Griswold, 1994; Pinderhughes, 1989), across genders, and race/gender groups (Langdon & Day, 1992), across sexual orientations (Seidman, 1993), and perhaps most comprehensively, across socioeconomic classes

(Bottomore, 1991; Davis & Proctor, 1989). There are individual family cultures (Davis and Proctor, 1989). There are cultures of recovery and cultures of addiction (Doweiko, 1996). Social workers engaged in policy and program development, research, direct practice, organizational leadership, housing advocacy, and other community-based practice must acknowledge that there is not one monolithic AIDS housing client. Subsequently, there is not one AIDS housing effort adequate to meet the needs of all people with HIV disease who might be at risk of homelessness.

Requisites for Culturally-Relevant Services

Effective work in the AIDS housing arena requires the highest standards for culturally-responsive and culturally-relevant practice. The arena of AIDS housing offers remarkable challenges and opportunities for fashioning culturally competent social work practice as it occurs at the intersection of race/ethnicity, class, gender, sexual orientation, and ability diversity not often found in our work to this degree.

Findings from this research suggest that as social workers approach AIDS housing issues, across the micro-mezzo-macro spectrum, there are several ways to enhance the cultural relevance of our work. Some of these follow:

1.) Continually examining and remediating our own heterosexism, racism, AIDS phobia, sexism, and elitism.

This is an on-going process for each of us, whether we're people of color, female, clean and sober, gay, poor, lesbian, male, middle income, HIV positive, bisexual, white, transgender, rich, addicted, and/or HIV negative. We ought to consistently access continuing education in order to learn about those we know only as stereotype, and identify and regulate our tendency to regard the "other" as inferior (Hammond, 1986; Pinderhughes, 1989; Riley & Greene, 1993).

2.) Engaging consumers in every stage of development and delivery.

Some housing and related services go under-utilized because they do not fit the culture and/or needs of the targeted population. Housing resources are too scarce to support the creation of housing that isn't

used. Consumer-driven housing development assures higher levels of utilization and consumer ownership (Bailey & Koney, 1996; Sawyer, 1993).

3.) Placing cultural responsiveness above parsimony and efficiency.

The institutionalization of managed care in health, mental health, and now child welfare fields has advanced a valuing of product and measurable outcomes over process and service. However, often what is done in the name of speed or efficiency can serve as a red herring for sexism, ethnocentrism, and other systems that seek to maintain imbalances of power. Creating inclusive systems in the AIDS services arena is a time-intensive process (Penner, 1995) but one fitting social work ethics and empowerment practice models.

4.) Offering culturally-specific, parallel services.

Economy of scale issues make the "one size fits all" approach to housing and service delivery the model of preference when resources are limited. However, resources and services that fit the needs of HIV+ gay white men may be completely inappropriate for HIV+ Puerto Rican women, and that which is empowering for Puerto Rican women may be less effective in the lives of HIV+ African American men. Proactive efforts to create housing and related parallel services that effectively suit distinct communities within the infected population not only honor diversity, they can also increase utilization (Morse & Rucker, 1993).

5.) Providing culturally-focused interventions.

There is a growing literature on the power of culturally-based interventions in the addiction treatment and mental health fields that could inform AIDS housing and related services in valuable ways (Garrett & Garrett, 1994; Jilek, 1994). The gay male community has already effectively utilized gay cultural pride as a source of healing, both for individuals and for a community ravaged by HIV disease (Hart, et. al., 1990; Wachter, 1992).

6.) Building capacity in non-dominant communities.

> Social workers can increase the ability of traditionally marginalized communities to provide services and engage in advocacy from within those communities by teaching the *language* needed to acquire resources from large bureaucracies such as HUD or HRSA, training in comprehensive management skills including finances, regulatory issues, resource development, utilizing automation, supervision, etc., and demystifying research language and methods (Iglehard and Becerra, 1996; Sohl, 1995; Uehara, et al., 1996).

These general approaches can inform all levels of social work practice. The following ideas are more specific to micro, mezzo, and macro levels of social work intervention in the AIDS housing arena.

Direct Practice

Perhaps the greatest, and most elemental implication of this research is the need for *service-enriched* housing for people living with HIV/AIDS. For many people who may avail themselves of AIDS-housing resources, having a debilitating, terminal illness is only one of many challenges they face. Drug addiction, poverty, homelessness, possibly mental illness, alienation from family and other forms of social support, criminal histories, high risk behaviors that compromise the health of self and others constitute just some of the issues facing many of the people in this study who are at high risk of homelessness and would be most likely to access publicly-funded housing. For many people in this study and in the wider infected community, these issues are rendered even more complex by parenting roles and the presence of minor children in the home. In tandem with enriched service environments is the importance of continuity and consistency of care due to the need for building trust in a system often mistrusted by the people at greatest need of services.

Case Management

Due to the variety and number of services needed by many people with HIV/AIDS, case management services appear to be the most effective method for connecting people with HIV disease to those diverse services

and the systems in which they are located (Indyk, et. al., 1993). In addition, those social work case managers who work with people at highest risk of homelessness must have advanced clinical assessment skills (Personal communication with D. Clark, Social Work Supervisor, Harborview Hospital's Madison Clinic, October, 1996). The assessment of acuity and level of functioning should form the basis for case plan development. The ability to assess mental illnesses, chemical dependency, and socially-isolating behaviors are all essential, particularly when placing people with AIDS in aggregate housing settings. The ability to assess the risks of poor parenting outcomes (neglect or abuse) among clients with minor children is also critical.

Expertise in accessing services from a variety of systems will provide the greatest service to people at high risk of homelessness. Social work specialists, for example, those who specialize solely in mental health, or chemical dependency, or family welfare, will be at a disadvantage in addressing the comprehensive needs of people at greatest risk of homelessness. Conversely, social workers who have advanced generalist skills and abilities to access and interact knowledgeably with a wide range of service providers may be well equipped to meet the needs of people with AIDS who are at greatest risk of homelessness. Brokers of a variety of services, these system-savvy social workers will need particular knowledge in working with the chemically addicted and/or mentally ill.

While the advanced generalist approach to social work training has not been well explicated in the past there is a growing body of literature, research, and curriculum development in the field (see Raymond, et al., 1996; Schatz, et al., 1990; and Gibbs, et al., 1990). A professional committee attached to the Council on Social Work Education designed to foment on-going study and development in advanced generalist training is a vital part of the Council and active in guiding the development of advanced social work education curriculum in the 21st century. The advanced generalist approach is gaining greater acceptance and status with increased societal acknowledgment of the value of holistic, versus specialized or compartmentalized, understandings of the human experience, as well it should in an increasingly complex society. While the advanced generalist approach has long been considered the preferred approach in rural social

work, the need for social workers in the AIDS services arena who can access and navigate a vast array of social services, support networks, and client populations expand its usefulness well into urban and suburban settings.

The multiplicity of problems among people at high risk of homelessness indicate that the case loads of social work case managers be small. People at high risk of homelessness, with multiple problems, especially chemical addiction, are likely to be mistrustful of social service systems and providers. So, in addition to the number of tasks, systems, and needs to be addressed while working with this population, the work requires a great deal of time for outreach, building trust, and finding/meeting clients "where they are" (both geographically and emotionally). Small case loads may facilitate effective outreach and high maintenance case work (Indyk, et. al., 1993; Sonsel, et. al., 1988; personal communication with D. Clark, 1996).

Cross System Education

Previously the majority of people with HIV/AIDS may have had little interaction with human service organizations prior to becoming ill, and in many cases post-illness contact was limited to AIDS service organizations. Today, however, as indicated by findings from this research, many people with HIV disease have previously been engaged with a variety of services and social control agencies, and continue to be engaged with them after infection. Some of these services include child and family welfare services, addiction treatment programs, mental health services, the criminal justice system, and homeless service providers, many of which are not knowledgeable about AIDS-related issues and needs. Social workers should be engaged as trainers and as those seeking professional development in expanding knowledge about HIV/AIDS-related information. In addition to better matching services to people with HIV/AIDS, education should be geared toward eliminating AIDS phobia among service providers with little previous experience with service provision to people with HIV disease.

Administrative Practice

Social workers employed at the "mezzo level" of practice have a great deal of power in determining the effectiveness of housing and related services for people living with HIV/AIDS. Cross-system service collaboration, or "wrap-around services", and the creation of organizational cultures that facilitate this mode of operating require progressive leadership at the administrative level. In addition, as discussed below, the need for capacity-building in organizations new to the AIDS services field provides roles for social workers, especially those from communities of color.

Collaboration Across Professions

The multiple needs and roles (such as the roles of parent, or partner) of many of the people in the sample data set suggest that a variety of service systems are likely to be accessed throughout the course of ones illness. Service providers from public and/or private health agencies, mental health agencies, child welfare agencies, chemical addiction treatment programs, income maintenance agencies, housing providers, AIDS service organizations, and others may all interact with low-income people living with AIDS. Service delivery systems that allow for remarkable collaboration and coordination across a variety of needs will best serve clients with multiple issues, many of which require a significant degree of professional expertise (addiction treatment, case management, treatment of severe mental illness, and intensive medical care).

From recent research on community-based collaborations Bailey and Koney (1996) suggest that

> "(o)ften organizations delude themselves into believing that their services or products can full all the needs of a targeted population...many organizations project the fantasy that to be the sole provider of products and services is good and is their goal. Interorganizational units know better. Their fundamental strategy is to collaborate, literally to co-labor (from the Latin *com-* plus *laborare*), or work together, to increase the impact of the services and products" (p. 607).

Service provision based on a team approach model comprised of professionals in inter-agency teams in addition to intra-agency teams may be particularly successful at placing the client, rather than the service domain of an agency, at the center of practice.

Organizational Capacity-Building

As the disease moves increasingly from the gay male community to communities of color, federal, state, and local funding agencies will be compelled to funnel assistance to people with HIV/AIDS through organizations based in those communities, an important acknowledgment of the effectiveness of community-based service delivery. However, in contrast to the gay male community, these communities have not had the past 20 years to develop services that can respond to the diverse and technical needs of people living with HIV/AIDS. Nor do they have the benefit of the relatively privileged, well-educated pool of people with a wealth of management experience that the white gay community has been able to offer AIDS service organizations (Andriote, 1995; Kayal, 1994). HIV/AIDS is infecting increasingly more people with limited material resources who come from communities with limited material resources. As an AIDS housing planner explained in a recent communication, "redirecting hundreds of thousands of dollars from the (large AIDS epicenter city) AIDS Foundation to the Ebenezer Baptist Church makes funders very nervous and they have real concerns about the ability of small organizations to meet the enormous needs surrounding them. They're also concerned about AIDS-phobia in the organizations they're funding. I mean drug addicts, queers, and prostitutes have never been really welcome in churches or recreation centers or mutual aid associations" (personal communication with anonymous AIDS housing planner, March, 1996).

In her study of organizations based in low-income communities, Sohl (1995) found that funding alone cannot equip organizations to meet the needs of the communities in which they are located.

> "Development and management of community-based non-profit organizations presents daunting challenges to low income community residents. Skills in planning, organizational development, board development, financial management, fund raising, personnel management, information systems, and program evaluation are not readily available within most low income communities. Traditional education and training opportunities in these areas is (sic) frequently alienating and off-target for individuals with limited formal education, little or no experience in management or leadership roles, and pressing financial needs" (p. 3).

Organizational capacity-building is an important role for social work. Social workers, especially social workers of color, with graduate training in social work administration can help build the capacity of organizations to manage large programs and the funds they require, hire skilled staff, and interact with other service providers, while remaining culturally relevant and grounded. In addition, social work education is infused with training in tolerance and the eradication of bigoted attitudes and service delivery. Social workers of color may play a unique role in building capacity as well as tolerance in organizations serving people with HIV/AIDS.

In their article on the presence of social workers in AIDS service organizations, Alperin and Richie (1989) suggest that

> "(p)rofessionally educated and experienced social workers are fully enmeshed in these agencies, which evolved to provide critical services to people with AIDS when many health and social service systems were slow to respond. Social workers interested in working in community-based AIDS service organizations need to be prepared to perform a diversity of social work and administrative functions and be ready to face challenges to professional self-awareness (regarding gaps in training and experience in AIDS-related services)" (p. 172).

Last year (1995) 1,317 African Americans, 581 Latino/as, and 90 Native Americans graduated with advanced degrees in social work. Twenty percent of the MSW's awarded in the US were awarded to people of color (Lennon, 1995). While social workers of color are likely called upon by their communities to meet a plethora of pressing needs, a case could be made for placing the capacity of ethnic community-based AIDS service organizations at top priority in light of the rate of infection in communities of color and the multiple needs of people of color with AIDS and their families.

Community-wide Practice

Education

The research described here, including epidemiological research on the trends in HIV infection, suggest that education and advocacy may be a priority for community-wide, or macro-level, social work practitioners. Since HIV/AIDS had its origin in the United States in the gay male community, killing tens of thousands of gay men, our society tends to think of HIV/AIDS as a gay male disease. Mainstream movies, theater, television, magazines, and

other media industries consistently represent people with HIV disease as gay, male, financially stable, and white. If resources are to be rallied around the housing needs of low income people living with HIV/AIDS, widespread re-education, especially among decision-makers, on 1.) the epidemiology of the disease and 2.) people with HIV/AIDS who are at greatest risk of homelessness, is very important (Hammond, 1986) . A startling number of white men continue to be infected with the HIV virus and, of course, not all white men are wealthy. However, ongoing education about the rate of infection across race/ethnicity groups and the higher incidence rate among low income Americans is essential in order to convince policy-makers that housing resources and related services for low-income people with HIV/AIDS should be a funding priority.

Advocacy

Advocacy activities in the area of AIDS housing should entail two important kinds of activities. First, direct advocacy for AIDS housing funding, for AIDS housing locations, for related services, and better emergency housing services for homeless people with HIV/AIDS is important in an environment of competing human needs amid shrinking public services. Second, social workers engaged in AIDS housing advocacy should devote energy toward the empowerment and equipping of low income people to advocate for their own needs, needs about which they are the experts and for which they are entitled to be served. While the gay male community has realized the latter and advocated successfully for increases in AIDS-related resources, traditionally impoverished, oppressed communities are less likely to act out of a strong sense of entitlement. Social workers who are advocates for oppressed people have a dual role of direct advocacy and the empowerment of those for whom they advocate.

Community capacity-building

Building communities' capacity to care for its members with HIV disease mirrors many tasks necessary in organizational capacity-building. First, fighting AIDS-phobia on a community-wide basis will be important as communities are increasingly called upon to meet the needs of people with AIDS in their own communities.

Second, macro level social workers can address the concerns of citizens who are resistant to the location of AIDS housing facilities in their neighborhoods (commonly referred to as NIMBY's--for "Not In My BackYard") through methodical, persistent, and fact-based methods.

Finally, fomenting increased community volunteerism to support the residents of AIDS housing in their neighborhoods will help to assure the meeting of needs far too great for professional helper alone to address. Much of this work has and should continue to focus in churches and other service organizations indigenous to communities of color.

Implications of the Findings for Social Work Research

This research suggests that there are, at least, three general areas in which increased research could improve services to people with HIV disease who may be at risk of homelessness. First, more specific information about people at risk of homelessness than is possible from this data set is needed in order to develop housing and related services appropriate for the people accessing publicly-funded AIDS housing. Second, more empirical information about promising models of AIDS housing is needed as increasingly more communities create housing opportunities for their citizens with HIV/AIDS. Finally, more and more consistent information about the prevalence of HIV/AIDS among the currently homeless could inform communities about the breadth of need for housing people with HIV disease. Each of these is explained in greater detail below.

Expanding Our Knowledge of Those at Greatest Risk of Homelessness

Research that expands our knowledge of the people at greatest risk of homelessness beyond that which can be assessed here is essential. Missing from this study is information about a number of issues of relevance to housing and related services planning. For instance, understanding any mental health issues with which respondents may be coping is important. Whether these be the widespread issues among people with HIV disease of grieving and depression (Kalichman & Sikkema, 1995) or more serious mental illnesses, their importance to housing planning and the planning of services related to housing is immense, particularly in light of the correlations among mental illnesses and homelessness.

There are many child welfare issues not covered in this research. More specific information about the children of parents living with HIV/AIDS should guide housing service planning. As the virus infects increasing numbers of poor people with children, housing that can accommodate families must be developed and more information about these families should inform the process. Agencies that have traditionally served families could benefit from greater knowledge of the issues HIV-infected parents will face throughout the progression of the disease, or through the treatment of the disease.

More information about substance use among people living with HIV/AIDS is essential. While this study provides basic information about hard drug use, greater detail regarding types of hard drugs, frequency and quantity of use, correlated behaviors, and treatment history could inform the types of housing (clean and sober versus harm reduction models) and the related services necessary to assure safe and healthful living environments for people with HIV/AIDS and histories of substance abuse. Greater detail on the frequency and quantity of alcohol and marijuana use would serve similar purposes.

Greater detail on the health status of possible housing clients could inform housing planning and the level of care necessary for the people most likely to need publicly-funded housing. While this study suggests that people who are HIV+ and are symptomatic may be at greater risk of homelessness than those who are not symptomatic, it does not provide information about the types of opportunistic diseases plaguing respondents nor the severity of the symptoms.

Evaluative Studies of AIDS Housing Models

Program evaluation research examining existing AIDS housing, especially those housing programs that serve the consumers described in the high risk group, is important for understanding the goals of these programs and the degree of effectiveness in reaching those goals. All AIDS housing models are new! In a sense, they are all pilot projects, communities' best efforts at meeting the needs of their citizens who live with HIV/AIDS. However, many are established to the point that evaluative research would not only

provide information about their effectiveness but could also produce guidelines for replication in other communities.

As AIDS housing providers consider harm reduction models, close and purposive observation and evaluation of their impact upon those who are drug addicted *and those who are not* should be required. Given the social unacceptability of harm reduction models as well as the safety issues surrounding illicit drug acquisition and use the credibility that structured program evaluation lends programs may increase community openness to these new housing models.

Other areas of program inquiry might include the effectiveness and impact of case management services related to housing, the impact of housing people who may have been connected to a social network of homeless people, (does it further isolate or increase connections to supportive networks?), the cost effectiveness of housing people with HIV/AIDS, the impact on the health status of those who are provided safe housing and related services, the impacts of changing the flow of money from agencies largely run by administrators from the dominant culture to agencies based in non-dominant ethnic communities, etc.

Evaluative research that can produce information on the effectiveness of collaborative services may be especially important as people most in need of housing bring a variety of needs to their housing setting. Collaborative evaluation research might ask if new models of "wrap around" services are more effective than more established models of specialized, territorial care. Other questions could include "what are the barriers to collaborative work?"; "what are the ways in which people are addressing and moving beyond barriers?"; and "how does a collaborative model of service provision enhance the quality of life among clients?"

Prevalence Research

While Bassuk's (1995) earlier quoted skepticism about the willingness of our society to meet the needs of all our homeless can be applied to the task of housing all people with HIV/AIDS at risk of homelessness, research that increases our knowledge of the number who are at such risk is important. Research efforts to test a wide sample of the homeless community to gain

an understanding of the degree to which people with AIDS are already homeless could arm AIDS housing advocates with compelling data about community needs and inform current providers of housing for the homeless.

Conclusion

Increased HIV infection among poor people in the United States and a parallel decrease in affordable housing units present a threat to the health, safety, and secure family life of many people with HIV disease. Problems such as severe mental illness and chemical addictions among people with HIV/AIDS increase vulnerability to this threat and may alienate those in need from the community at large. Social workers in the fields of child and family welfare, mental health, medical social work, recovery services, emergency assistance and others have already been engaged, and taken leadership roles, in meeting the diverse needs of people with HIV/AIDS. This study offers compelling reason for social workers to expand our presence in the growing national efforts to develop safe, supportive, normalized, and comfortable homes for impoverished Americans infected with HIV. This section of the Dissertation has presented many ways in which we can approach this challenge.

In her vision of the work of Hull House, Jane Addams evoked from herself and from her colleagues an approach to social work that we may do well to remember and implement in housing and related services for people with HIV/AIDS. Indeed, AIDS housing efforts infused with the legacy of the Settlement House movement may foster the development of places to *live* that mirror Addams' vision of Hull House:

> "The Settlement then is an experimental effort to aid in the solution of the social and industrial problems which are engendered by the modern conditions of life in a great city. It insists that these problems are not confined to any one portion of the city. ...It must be open to conviction and must have a deep and abiding sense of tolerance. It must be hospitable and ready for experiment. It should demand from its residents a scientific patience in the accumulation of facts and the steady holding of their sympathies as one of the best instruments for that accumulation. It must be grounded in a philosophy whose foundation is on the solidarity of the human race, a philosophy that does not waiver when the race happens to be represented by a drunken woman or an idiot boy" (Addams, 1981; p. 98. Originally published in 1910.).

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Appendix A

ALAMEDA COUNTY HIV/AIDS HOUSING CONSUMER SURVEY

Note: This is a housing needs survey for people who have HIV/AIDS. Your participation is very important and we would like to have your input. The information gathered in this needs assessment will be used as background information in the development of the Alameda County AIDS Housing Plan. Thank you for your participation.

1. **Have you completed this survey before?**

   (If yes, please do not fill out this form again)

   [ ] Yes
   [ ] No

2. **What is your current HIV status?**

   [ ] HIV-positive, no physical problems
   What year did you learn of your HIV status? _____

   [ ] HIV-positive with physical problems
   What year did you learn of your HIV status? _____

   [ ] AIDS diagnosis - have been told I have AIDS
   What year did you get your AIDS diagnosis? _____

   [ ] HIV-negative Is there another person in your household who is HIV-positive?

   [ ] Yes (what relationship?) _____, please continue
   [ ] No

   (please do not continue)

3. **What is your gender?**

   [ ] Female
   [ ] Male
   [ ] Transgender (M-F)
   [ ] Transgender (F-M)

4. **What is your sexual orientation?**

   [ ] Woman who has sex only with other women
   [ ] Man who has sex only with other men
   [ ] Woman or man who has sex with people of both same and opposite gender
   [ ] Woman or man who has sex only with people of opposite gender

5. **What is your racial/ethnic group?**

   [ ] Latino/a
   [ ] African American
   [ ] Chinese
   [ ] Native American
   [ ] White
   [ ] Japanese
   [ ] Korean
   [ ] Southeast Asian
   [ ] Pacific Islander
   [ ] Other racial/ethnic group. _____

   What is your primary language

   [ ] Spanish
   [ ] English
   [ ] Chinese
   [ ] Cambodian
   [ ] Vietnamese
   [ ] Japanese
   [ ] Korean
   [ ] Laotian
   [ ] Tagalog
   [ ] Other _____

6. **What year were you born?** _____

7. **Who do you live with?**
   [ ] Live alone
   [ ] Spouse/partner
   [ ] Your spouse/partner and children
   [ ] Your children
   [ ] Other adults and children
   [ ] Parent(s)/family
   [ ] Friend(s)/roommate(s)
   How many people are in your household? Total: _____
   How many children? _____
   What are their ages? _____

8. **What is your zip code?**_____

9. **Is there another person in your household who is HIV-positive?**
   [ ] Yes (what relationship?) _____
   [ ] No

10. **What kind of place do you live in? (check only one)**
   [ ] Homeless, live on the streets
   [ ] In a shelter
   [ ] I live in my car, vacant building or commercial building
   [ ] In a halfway house
   [ ] In a public housing building
   [ ] In a transitional house
   [ ] I rent a room in a house
   [ ] I rent a home or apartment
   [ ] In a drug or alcohol treatment center
   [ ] In a dedicated AIDS housing residence
   [ ] In a friend's or relative's home
   [ ] I own a house or condo
   [ ] Other (please explain) _____

11. **How long have you lived where you are now?**
   [ ] Less than 6 months
   [ ] 6 months to 1 year
   [ ] 1 to 2 years
   [ ] 3 to 5 years
   [ ] More than 5 years
   [ ] All your life

12. **Did you get your current housing because you have HIV/AIDS?**
   [ ] Yes
   [ ] No

13. Do you get any kind of assistance from the government to help with rent?

[ ] Yes

[ ] No

If yes, what kind(s)?

[ ] Section 8 housing voucher
[ ] Shelter Plus Care
[ ] Ryan White (what agencies?) _____
[ ] Other: _____

14. Do you receive any of the following benefits? (check all that apply)

[ ] GA (General Assistance Unemployable)
[ ] SSI (Supplementall Security Income)
[ ] SDI (State Disability Income)
[ ] SSA/ SSDI (Social Security Disability Income)
[ ] AFDC (Aid to Families with Dependent Children)
[ ] Medi-Cal
[ ] Medicare
[ ] Waiver services (HIV/AIDS Home and Community Services)
[ ] Private health insurance (Kaiser, Blue Cross, FHP, QualMed, etc)
[ ] Private disability insurance

15. Are you on any waiting lists for housing or rental assistance?

[ ] Yes

[ ] No

If yes, which ones:

[ ] Shelter Plus Care - how long? _____
[ ] Section 8 - how long? _____
[ ] Providence House - how long? _____
[ ] Other waiting list - how long? _____

16. Not counting yourself, how many people do you support? _____

17. What are your monthly cash (out of pocket) costs for health care and prescriptions for you and your family? _____

18. What is your monthly income?

[ ] Under $300
[ ] $300 - $500
[ ] $501 - $750
[ ] $751 - $1,000
[ ] $1,001 - $1,500
[ ] $1,501 - $2,000
[ ] $2,001 - $2,500
[ ] Over $2,500

19. How much do you spend each month on your housing (rent, utilities, mortgage)?

_____

20. Would you have to move if your monthly income went down by $100?

[ ] Yes
[ ] No

21. If you have moved since you learned you have HIV/AIDS, what were the reasons for your move? (check all that apply)

If yes, how many times in the last 3 years? _____

[ ] I was asked to move because I am HIV-positive
[ ] I was asked to move because of my drug/alcohol use
[ ] moved because I no longer had enough money to pay my rent
[ ] moved in for support from a caregiver or friends
[ ] I moved to live with/near family
[ ] moved to be in a safer neighborhood
[ ] I moved to get away from my old neighborhood
[ ] moved so that I could remain clean and sober in a new neighborhood
[ ] moved to get better HIV/AIDS-related services
[ ] I moved to be closer to my doctor

[ ] Other: _____

22. Have you ever been homeless?

[ ] Yes

[ ] No

If yes, how many times in the last 3 years? _____

How long was your most recent period of homelessness?_____

Since your first homelessness, what was the longest time you lived in one place?

_____

23. Why did you become homeless?

[ ] Couldn't afford my rent
[ ] Alcohol or drug use issues
[ ] Health status, i.e., hospitalization
[ ] Family/partner/roommate made me move
[ ] Evicted (if so, why?) _____

24. Are you currently active in a drug or alcohol treatment program?

[ ] Yes

[ ] No

If yes, what kind(s)? (check all that apply)

[ ] Methadone maintenance program
[ ] Drug-free counseling program
[ ] 12-step program (AA, NA, CA)
[ ] Residential rehabilitation program
[ ] Inpatient detox program

[ ] Other: _____

25. What substances/drugs do you use now? (check all that apply)

- [ ] Prescription medications
- [ ] Alcohol
- [ ] Marijuana
- [ ] Crack
- [ ] Cocaine
  - How do you use? _____
- [ ] Heroin
  - How do you use? _____
- [ ] Non-prescription pills
  - Which ones? _____
- [ ] Other: _____

26. If you want alcohol or drug treatment now and are not getting it, please tell us why. (check all that apply)

- [ ] don't know where or who to call for help
- [ ] I am on a waiting list for a methadone program
- [ ] I am on a waiting list for a treatment program (not methadone)
- [ ] I was in a program but was asked to leave
- [ ] I don't want treatment right now
- [ ] Cost of treatment is too high
- [ ] Location of treatment program
- [ ] Lack of child care
- [ ] Provider bias
- [ ] Other: _____

27. Based on your current health status, what kind of housing situation would you choose now?

Rank in order of choice, "1" = first choice, to "7" = last choice, don't just put check marks.

a. ___ Live alone
b. ___ Live with family or parents
c. ___ Live with friends
d. ___ Live in a shared house/apartment with other people who have HIV/AIDS
e. ___ Move to a housing program with supportive services on-site
f. ___ Residential hospice
g. ___ Skilled nursing facility

28. If you get sicker from HIV or AIDS, what kind of housing situation would you choose?

Rank in order of choice, "1" = first choice, to "7" = last choice, don't just put check marks.

a. ___ Live alone
b. ___ Live with family or parents
c. ___ Live with friends
d. ___ Live in a shared house/apartment with other people who have HIV/AIDS
e. ___ Move to a housing program with supportive services on-site
f. ___ Residential hospice
g. ___ Skilled nursing facility

29. How would you feel about living in a shared apartment or house in which both people who are HIV-positive with no physical symptoms and people disabled by AIDS live?

[ ] Like - why? _____

[ ] Don't care - why? _____

[ ] Dislike - why? _____

30. If you had to move, what is most important about where you might live? (Rank in order of choice, "1" = first choice, to "5" = last choice)

a. ___ Living close to shopping areas
b. ___ Living close to your doctor, clinic, or hospital
c. ___ Living close to your friends or family
d. ___ Living close to public transportation
e. ___ Living close to a child care or day care center

31. If you had to move, what is most important about your home? (Rank in order of choice, "1" = first choice, to "5" = last choice)

a. ___ Living with people of your same cultural group and language, which language? _____
b. ___ Living in a safe neighborhood
c. ___ Living in a building where drug and alcohol use is tolerated
d. ___ Living in a wheelchair accessible building
e. ___ Living in clean and sober housing

32. If you had to choose between the following options, which would you prefer?

[ ] Pay more rent to have my own apartment

OR

[ ] Share a less-expensive apartment with others

33. If you had to choose between the following options, which would you prefer?

[ ] Move to another city for a less-expensive apartment of my own

OR

[ ] Live close to my current neighborhood in shared housing

34. If you had to choose between the following options, which would you prefer?

[ ] Have a private bedroom with shared bathroom in a shared apartment or house

OR

[ ] Have a private bedroom with shared bathroom in a low-income hotel

35. If you had to choose between the following options, which would you prefer?

[ ] Live in an apartment building where only other people with HIV/AIDS live

OR

[ ] Live in an apartment building that mixes people with HIV/AIDS with other low-income residents

36. If you had to choose between the following options, which would you prefer?

[ ] Live in my own apartment with occasional in-home support services

OR

[ ] Have my own bedroom with shared bathroom in a shared house with on-site services

37. If you had to choose between the following options, which would you prefer?

[ ] Have my own bedroom with shared bathroom in a shared house with on-site services

OR

[ ] Move in with family or friends permanently

38. What city in Alameda County would you like to live in? (check all that apply)

[ ] Oakland
[ ] Berkeley
[ ] Other North County (Albany, Emeryville, Alameda)
[ ] Mid-County (San Leandro, San Lorenzo, Castro Valley, Hayward)
[ ] South County / Tri-City (Fremont, Newark, Union City)
[ ] East County / Tri-Valley (Pleasanton, Livermore, Dublin)

39. If Oakland, which neighborhoods would you like to live in? (check all that apply)

[ ] Downtown Oakland
[ ] West Oakland
[ ] East Oakland
[ ] Oakland Hills
[ ] Chinatown
[ ] Piedmont
[ ] Fruitvale
[ ] Grand Lake, Lake Merrit, Lake Shore
[ ] Other _____

40. Do you have anything to add, or is there something we missed?

_____

_____

_____

_____

Thank you! Please return completed survey by May 1st to:

Julienne Brown
Corporation for Supportive Housing
1540 San Pablo Avenue, Suite 600
Oakland, CA 94612
Tel. 510-251-5953
Fax 510-251-5954

Appendix B
Housing Preference Tables

Table A
Housing Preferences of Respondents in Chicago, Phoenix, Alameda and Riverside/San Bernardino Counties
n=2237

Respondents would choose to live in...		their own apartment	a shared apartment
Entire Subsample		**74%**	**26%**
By gender *	Women	78%	22%
	Men	73%	27%
By large ethnic groups	African Americans	77%	23%
	Latinas/Latinos	72%	28%
	Native Americans	80%	20%
	White respondents	73%	27%
By housing situation	Currently Homeless	74%	26%
	Currently Housed	74%	26%
By risk group	Low risk	77%	23%
	Moderate risk	73%	27%
	High risk	73%	27%
By covivant **	Lives alone	81%	19%
	Lives w/ partner	72%	28%
By parental status *	Kids in the home	81%	19%
	No kids at home	73%	27%
By HIV status *	HIV+, no symptoms	73%	27%
	HIV+ with symptoms	78%	22%
	AIDS diagnosis	71%	29%
By sexual orientation **	Lesbian	44%	56%
	MSM	68%	32%
	Bisexual	67%	33%
	Heterosexual	81%	19%

* $p < .05$ ** $p < .01$

Table B
Housing Preferences of Respondents in Chicago and Phoenix
n=1036

Respondents would choose to live in...		a private room in SRO	their own bedroom in a shared apartment
Entire Subsample		**39%**	**61%**
By gender	Women	40%	60%
	Men	39%	61%
By large ethnic groups **	African Americans	47%	53%
	Latinas/Latinos	38%	62%
	Native Americans	32%	68%
	White respondents	34%	66%
By housing situation **	Currently Homeless	52%	48%
	Currently Housed	37%	63%
By risk group **	Low risk	30%	70%
	Moderate risk	33%	67%
	High risk	43%	57%
By covivant **	Lives alone	51%	49%
	Lives w/ partner	30%	70%
By parental status	Kids in the home	39%	61%
	No kids at home	39%	61%
By HIV status **	HIV+, no symptoms	42%	58%
	HIV+ with symptoms	44%	56%
	AIDS diagnosis	33%	67%
By sexual orientation **	Lesbian	17%	83%
	MSM	32%	68%
	Bisexual	39%	61%
	Heterosexual	46%	54%

* $p < .05$ ** $p < .01$

Table C
Housing Preferences in Alameda, Riverside & San Bernardino Counties
n=1080

Respondents would choose to ...		move to have their own apartment	Stay in neighborhood and share housing
Entire Subsample		**52%**	**48%**
By gender	Women	53%	47%
	Men	51%	49%
By large ethnic groups *	African Americans	57%	43%
	Latinas/Latinos	52%	48%
	Native Americans	44%	56%
	White respondents	46%	54%
By housing situation	Currently Homeless	57%	43%
	Currently Housed	51%	49%
By risk group	Low risk	45%	55%
	Moderate risk	52%	48%
	High risk	54%	46%
By covivant	Lives alone	51%	49%
	Lives w/ partner	53%	47%
By parental status	Kids in the home	48%	52%
	No kids at home	51%	49%
By HIV status *	HIV+, no symptoms	56%	44%
	HIV+ with symptoms	52%	48%
	AIDS diagnosis	46%	54%
By sexual orientation **	Lesbian	63%	37%
	MSM	45%	55%
	Bisexual	56%	44%
	Heterosexual	59%	41%

* $p < .05$ ** $p < .01$

Table D
Housing Preferences of Respondents in
Chicago, Phoenix, Alameda and Riverside/San Bernardino Counties
n=2012

Respondents would choose to live in...		their own room in group house	private room in an SRO
Entire Subsample		**62%**	**38%**
By gender **	Women	54%	46%
	Men	64%	36%
By large ethnic groups **	African Americans	50%	50%
	Latinas/Latinos	62%	38%
	Native Americans	61%	39%
	White respondents	69%	31%
By housing situation **	Currently Homeless	50%	50%
	Currently Housed	63%	36%
By risk group **	Low risk	76%	24%
	Moderate risk	66%	34%
	High risk	54%	46%
By covivant *	Lives alone	60%	40%
	Lives w/ partner	66%	34%
By parental status	Kids in the home	63%	37%
	No kids at home	62%	38%
By HIV status *	HIV+, no symptoms	61%	39%
	HIV+ with symptoms	59%	41%
	AIDS diagnosis	66%	34%
By sexual orientation **	Lesbian	40%	60%
	MSM	75%	25%
	Bisexual	50%	50%
	Heterosexual	57%	43%

* $p < .05$ ** $p < .01$

Table E
Housing Preferences of Respondents in Chicago and Phoenix
n=967

Respondents would choose to live in...		Housing only for people with AIDS	Housing for PWA's & other disabilities
Entire Subsample		**29%**	**71%**
By gender	Women	26%	74%
	Men	30%	70%
By large ethnic groups **	African Americans	19%	81%
	Latinas/Latinos	26%	74%
	Native Americans	28%	72%
	White respondents	37%	63%
By housing situation	Currently Homeless	29%	71%
	Currently Housed	29%	71%
By risk group *	Low risk	33%	67%
	Moderate risk	28%	72%
	High risk	20%	80%
By covivant	Lives alone	29%	71%
	Lives w/ partner	37%	63%
By parental status	Kids in the home	25%	75%
	No kids at home	30%	70%
By HIV status *	HIV+, no symptoms	23%	77%
	HIV+ with symptoms	29%	71%
	AIDS diagnosis	33%	67%
By sexual orientation **	Lesbian	25%	75%
	MSM	35%	64%
	Bisexual	28%	72%
	Heterosexual	20%	80%

* $p < .05$ ** $p < .01$

Table F
Housing Preferences in Alameda, Riverside & San Bernardino Counties
n=1037

Respondents would choose to live in...		Housing only for people with AIDS	Housing for PWA's & low income people
Entire Subsample		**50%**	**50%**
By gender **	Women	29%	71%
	Men	56%	44%
By large ethnic groups **	African Americans	30%	70%
	Latinas/Latinos	47%	53%
	Native Americans	57%	43%
	White respondents	67%	33%
By housing situation **	Currently Homeless	26%	74%
	Currently Housed	51%	49%
By risk group **	Low risk	69%	31%
	Moderate risk	54%	46%
	High risk	37%	63%
By covivant **	Lives alone	48%	52%
	Lives w/ partner	64%	36%
By parental status **	Kids in the home	36%	64%
	No kids at home	52%	48%
By HIV status *	HIV+, no symptoms	53%	47%
	HIV+ with symptoms	43%	57%
	AIDS diagnosis	52%	48%
By sexual orientation **	Lesbian	26%	74%
	MSM	61%	39%
	Bisexual	38%	62%
	Heterosexual	39%	61%

* $p < .05$ ** $p < .01$

Table G
Housing Preferences of Respondents in Chicago, Phoenix, Alameda and Riverside/San Bernardino Counties
n=2117

Respondents would choose to live in...		a group house w/on-site services	their own apartment with occasional assistance
Entire Subsample		**21%**	**79%**
By gender	Women	21%	79%
	Men	21%	79%
By large ethnic groups *	African Americans	22%	78%
	Latinas/Latinos	23%	77%
	Native Americans	31%	69%
	White respondents	18%	83%
By housing situation *	Currently Homeless	28%	72%
	Currently Housed	20%	80%
By risk group *	Low risk	17%	83%
	Moderate risk	20%	80%
	High risk	20%	80%
By covivant	Lives alone	19%	81%
	Lives w/ partner	19%	81%
By parental status	Kids in the home	18%	82%
	No kids at home	21%	79%
By HIV status	HIV+, no symptoms	23%	77%
	HIV+ with symptoms	19%	81%
	AIDS diagnosis	20%	80%
By sexual orientation	Lesbian	29%	71%
	MSM	20%	80%
	Bisexual	21%	79%
	Heterosexual	22%	78%

* $p < .05$ ** $p < .01$

Table H
Housing Preferences in Alameda, Riverside & San Bernardino Counties
n=1052

Respondents would choose to live in...		a group house with on-site services	Move in with friends or family permanently
Entire Subsample		**45%**	**55%**
By gender *	Women	39%	61%
	Men	48%	52%
By large ethnic groups *	African Americans	47%	54%
	Latinas/Latinos	36%	64%
	Native Americans	33%	68%
	White respondents	50%	50%
By housing situation **	Currently Homeless	62%	38%
	Currently Housed	44%	56%
By risk group **	Low risk	50%	50%
	Moderate risk	34%	66%
	High risk	45%	55%
By covivant **	Lives alone	58%	42%
	Lives w/ partner	44%	56%
By parental status	Kids in the home	39%	61%
	No kids at home	46%	54%
By HIV Status	HIV+, no symptoms	43%	57%
	HIV+ with symptoms	49%	51%
	AIDS diagnosis	44%	56%
By sexual * orientation	Lesbian	33%	67%
	MSM	49%	51%
	Bisexual	47%	53%
	Heterosexual	40%	60%

* $p < .05$ ** $p < .01$

Lynn D. Keenan
Curriculum Vitae

2014 E. Mercer St.
Seattle, Washington 98112
(206) 860-0927

EDUCATION

Ph.D. 1996 Social Welfare Program, School of Social Work, University of Washington, Seattle, Washington.

Dissertation: Identifying Risks Factors for Homelessness Among People Living with HIV Disease

Graduate Certificate in Women Studies, Women Studies Department University of Washington, Seattle, WA.

M.S.W. 1988 Colorado State University, Fort Collins, Colorado. Specialization: Advanced Generalist Practice in Transitional and Rural Communities.

B.A. 1979 Westmont College, Santa Barbara, California. Major: Religious Studies and Sociology

ACADEMIC HONORS AND AWARDS

Graduated Summa cum laude, Colorado State University, 1988.

Member of Phi Kappa Phi Honor Society, 1988-present

PROFESSIONAL EXPERIENCE

1995-present **Coordinator of Evaluation.** The Northwest Institute for Children and Families, University of Washington, Seattle, Washington.

Responsibilities: Plan and implement multi-method program evaluations of several child and family welfare programs throughout the northwest region of the US. The evaluation approach is influenced by organizational development and participatory action research tenets.

1993-present **Research Consultant/Director.** The Action Research Group, Seattle, Washington.

Responsibilities: Provide a spectrum of research services to community-based organizations in the Pacific Northwest. Emphasis has been given to organizations that seek to utilize research and evaluation methods and data to foster positive change, either internal or external to the organization.

Clients have included: Genesis House Treatment Center, AIDS Housing of Washington, The Casey Family Program, The HIV/AIDS Program Development and Evaluation Unit, The Northwest Resource Center for Children, Youth, and Families, The Seattle Peace Chorus, The Seattle Womens Resource Project, Sexual Minority Aging Resource Team, the

Multiple Sclerosis Association of King County, the Veterans Administration Pharmacy Services, and the Washington State Department of Health.

1992-present **Instructor.** School of Social Work, University of Washington, Seattle, Washington.

Responsibilities: Teach master level courses: Cultural Diversity and Societal Justice, Advanced Research Methods, and Utilizing Microsoft Excel as Database in Social Science Research. Facilitate doctoral seminar.

1991 - 1994 **Research Analyst.** The Casey Family Program, Seattle, Washington.

Responsibilities: Plan and implement research studies involving children in long-term foster care and a variety of program evaluations within this national foster care agency which serves 1200 children in thirteen states. Projects include assessing independent living skills of youth in family foster care, evaluating an intensive after care program for youth adjudicated as delinquent, and assessing the impact of youth who participate in a wilderness work project run in conjunction with the U.S. Forest Service.

1991-1992 **Teaching Assistant.** School of Social Work, University of Washington, Seattle, Washington.

Responsibilities: Assist in doctoral level statistics series including creation and implementation of statistical lab in the use of the Statistical Package for the Social Sciences (SPSS). Teach master level course in human life span development.

1989 - 1990 **Director.** Broadway Assistance Center, Denver, Colorado

Responsibilities: Direct provision of crisis-related assistance to individuals and families, grant writing, budgeting, supervision of staff, community development.

1988 - 1989 **Case Manager/Volunteer Coordinator.** Denver Emergency Housing Coalition, Denver, Colorado.

Responsibilities: Case management for 15-20 homeless families, supervise the placement and follow-up of community volunteers matched with homeless families for support and resource brokering.

1987 - 1988 **Regional Prevention Specialist.** Colorado Alcohol and Drug Abuse Division of the Colorado Department of Health, Glenwood Springs, Colorado.

Responsibilities: Provide rural communities with technical assistance in the planning and implementation of substance abuse prevention programs.

1980 - 1986 **Associate Director.** Mennonite Voluntary Service, Newton, Kansas.

Responsibilities: Hire, place, and supervise full-time workers in grassroots or community-based organizations throughout Canada and the United States.

1979 - 1980 **Counselor.** Suicide Prevention of Alameda County, Berkeley, California.

Responsibilities: Crisis intervention counseling.

PUBLICATIONS

Journal Articles:

Keenan, L., Dyer, E., Morita, L., Shaskey-Setright, C. (1990). Toward an understanding of mentoring in rural communities. Human Services in the Rural Environment, 14(2), pp.11-17.

Articles in Press:

Keenan, L. & Nystrom, N. (1996). The experiences of lesbian, gay, bisexual, and transgender individuals with health and mental health care providers: Findings from a national study. Social Work.

Keenan, L., Crevelt, M., Crevelt, B. (1996). The Boise Wilderness Work Project: Evaluating the impact of adventure camping in the lives of youth from disrupted homes. Camping Magazine. (A national publication of the American Camping Association which uses a special peer review process.)

Articles in Review:

Hayashi, R., Keenan, L., and Miller, R. (1996). Child welfare workers respond to agency computerization: Good news from the field. Submitted to Computers in Social Work.

Keenan, L. and Adams, J. (1995). Measuring the increase in environmental knowledge among participants of a wilderness work project: hopeful signs for maintained knowledge and integrated concepts. Submitted to The Journal of Environmental Education.

Keenan, L. & Mauzerall, H. (1995). From theory to axes (and picks and shovels): The conceptual model and theoretical framework for a wilderness work project. Submitted to Adolescence.

Works in Progress:

Keenan, L. and Pecora, P. (1996). Re-engineering social work practice and computerization in a national foster care agency: A progress report.

Keenan, L. (1996). The emergence of feminism in a school of social work: milestones, opportunities, and four instrumental women.

Keenan, L. (1996). Creating a classroom climate for teaching cultural diversity and societal oppression.

Research Monographs and Reports:

Keenan, L. (1996) Final Report on the Boise Wilderness Work Project Evaluation: A Three Year Study. The Casey Family Program, Seattle, WA.

Keenan, L & Ortega, D. (1996). Findings from the Multiple Sclerosis Association of King County 1996 Consumer Satisfaction and Needs Assessment. Multiple Sclerosis Association of King County, Seattle, WA.

Keenan, L. & Peterman, D. (1996). Findings from the 1995 HIV Care Needs Assessment for Washington State. The Washington State Department of Health; HIV/AIDS Client Services and Early Invention, Olympia, WA.

Keenan, L. (1995). Findings from the Alameda County HIV/AIDS Housing Survey for Berkeley, California. The Action Research Group, Seattle, WA.

Keenan, L., Adams, W., Ezell, M., Hayashi, R., Nicoll, A., Pecora, P. (1995). Staff Responses to Program Automation: Report on Three Years of Social Work Engineering and Computer Technology at The Casey Family Program. The Casey Family Program, Seattle, WA.

Keenan, L. (1993). The Wilderness Work Project evaluation-Executive summary. The Casey Family Program, Seattle, WA.

Keenan, L. (1993). The Forestry Apprenticeship Program Evaluation-Final report to constituents. The Casey Family Program, Seattle, WA.

Pecora, P. & Keenan, L. (1993). Evaluation design for the Casey Family Program Specialized Family Care Program. The Casey Family Program, Seattle, WA.

Keenan, L. & Pecora, P. (1992). Evaluation design for the Casey Wilderness Work Project. The Casey Family Program, Seattle, WA.

PROFESSIONAL TRAINING AND CONFERENCE PRESENTATIONS

The Second National AIDS Housing Conference. Using Data in AIDS Housing Advocacy and Planning. Seattle, WA. September, 1996.

The Gender, Race, Ethnicity, Class, and Sexual Orientation in Teaching and Research Conference. Creating a classroom environment for teaching diversity content. Washington State University. Pullman, WA. February, 1995.

Association of Researchers in Non-profit Organizations and Voluntary Associations Annual Conference. Social Workers' Reaction to Agency-Wide Computerization. Berkeley, CA. October, 1994.

20th National Conference on Juvenile Justice. Intensive aftercare for juveniles: The Specialized Family Care Program. Seattle, WA. March, 1993.

Council on Social Work Education Annual Program Meeting. The emergence of a feminist presence at the University of Washington School of Social Work. Kansas City, MO. February-March, 1992.

13th Annual National Institute on Social Work and Human Services in Rural Areas. Mentoring Relationships in rural Colorado: Hope in times of diminishing resources. Ft. Collins, CO. July, 1988.

National Association of Social Workers, Colorado Chapter. Mentoring relationships in rural Colorado: What can be learned about informal helping systems? Denver, CO. April 1988.