End of Participation in Assisted Housing: What Can We Learn **About Aging in Place?**

Assisted Housing Research Cadre Report



U.S. Department of Housing and Urban Development | Office of Policy Development and Research

End of Participation in Assisted Housing: What Can We Learn About Aging in Place?

Prepared for: U.S. Department of Housing and Urban Development Office of Policy Development and Research

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Preface

Approximately 37 percent of households that receive HUD housing assistance are headed by an elderly person. This report is about the demographics of the elderly residents who receive assistance from HUD. It presents the ages at which these residents leave assisted housing, and discusses the strategies that could enhance elderly households' ability to live safely and comfortably in HUD-assisted housing for as long as possible, avoiding costly moves to nursing homes and other long-term care.

In recent years, elderly tenants left HUD housing programs at an average age of 78 years. HUD's data do not include information on the reasons for departure or destination at exit. Some tenants die, and some leave subsidized housing because they need services or supports that are not provided in their current housing. Key findings include the following:

• Across all program types, 27 percent of elderly households who left during the study period were at least age 85 at exit. The proportion staying until at least age 85 was highest in the assisted multifamily housing programs (30 percent) and lowest in the Housing Choice Voucher program (21 percent).

• Housing occupied primarily by elderly persons seems to have greater success retaining residents until more advanced average ages than housing occupied primarily by non-elderly people, even in high-poverty neighborhoods.

The report contains a review of recent literature on 'aging in place' that finds that the most commonly cited factor affecting the length of time elderly residents can remain in their homes is *access to quality support services*, but that costly and intensive interventions are not necessarily needed in all cases. In fact, assistance with simple housekeeping and lifting of heavy objects were two of the most widely reported unmet service needs.

The report's review of the literature also notes that to age in place many older adults will need to incorporate some accessibility features, such as lever door handles, ramps, wider doorways to accommodate wheelchairs, nonslip floor surfaces, and bathroom aids. While many Section 202 and other project-based senior housing projects have incorporated these elements of universal design, programs not specifically targeted to senior citizens, such as public housing and housing leased by Housing Choice Voucher holders, may not have these accessibility features. The report concludes with recommendations for future research.

TABLE OF CONTENTS

EXECUTIV	/E SUMMARY	. vi
CHAPTER	1: DATA SOURCES AND METHODOLOGY	1
1.1	Data Sources	1
1.2	Methodology	1
•	Identifying Program Exits	2
•	Identifying Housing Type	4
1.3	Characteristics of the Analysis File	4
CHAPTER	2: FINDINGS	
2.1	EOP for All Program Types	10
2.2	Regional Differences in EOP	
2.3	EOP and Household Characteristics	13
•	Gender, Disability Status and Race	13
•	Household Size and EOP	
2.4	Neighborhood Characteristics and EOP	16
•	Neighborhood Poverty Rates and EOP	17
•	EOP, Occupancy Type, and Neighborhood Characteristics	18
CHAPTER	3: LITERATURE REVIEW RESULTS	19
3.1	Identifying At-Risk Households	19
3.2	Promoting Aging in Place	20
3.3	Lessons from Promising Program Models	22
3.4	Measuring Progress: Potential Data Elements and Indicators	24
CHAPTER	4: RECOMMENDATIONS FOR FURTHER RESEARCH ON AGING IN PLAC	Е
IN ASSIST	ED HOUSING	26
•	Extending the EOP Analysis	26
•	Monitoring and Measuring Aging in Place	26
•	Adapting Promising Program Models	
BIBLIOGR	APHY	28
APPENDIX	A: SUPPLEMENTAL DATA TABLES	30

LIST OF EXHIBITS

Exhibit 1-1: Distribution of Household Exits Identified by the EOP Flag and Record Truncat	tion
Method	3
Exhibit 1-2: Number of HUD-Assisted Households by Program Type and Year: 2000-2008	5
Exhibit 1-3: Number of HUD- Assisted Projects by Program Type and Year: 2000-2008	6
Exhibit 1-4: All Households Exited by Program Type and Year: 2000-2008	7
Exhibit 1-5: Elderly Households Exited by Program Type and Year: 2000-2008	8
Exhibit 1-6: Number of Elderly Households Exited by Program Type and Year: 2000-2008	8
Exhibit 1-7: Count of Elderly Households Exited by Program Type and Project Occupancy 7	Гуре:
2000-2008	9
Exhibit 2-1: Age at EOP for All Program Types	10
Exhibit 2-2: Average Age at Exit of Elderly Households by HUD Region: 2000-2008	11
Exhibit 2-3: Proportion of Elderly Households Exited at Age 85+ by HUD Region: 2000-200	08 12
Exhibit 2-4: Average Age at EOP by Characteristics of Heads of Household	13
Exhibit 2-5: Household Characteristics and EOP of Age 85 or More	14
Exhibit 2-6: Household Size and EOP	16
Exhibit 2-7: Age at EOP and Neighborhood Poverty Rates	17
Exhibit 2-8: EOP by Neighborhood Poverty Rate and Occupancy Type	18

Executive Summary

The average life expectancy of a senior citizen in the United States (that is, someone who has reached the age of 65) is 18.6 years, or roughly age 84. Between 2000 and 2030, the number of adults age 65 and over is expected to double, from 35 million to more than 70 million, resulting in a U.S. population that is comprised of 20 percent older adults.¹ Most older adults and their families and caregivers prefer to live as independently as possible, for as long as possible. Further, they believe that with appropriate care giving resources, physical design changes, and accessibility to needed services, conventional residences can accommodate individuals with all types of limitations and chronic health conditions, allowing older adults to avoid or delay leaving their independent housing for a higher level care such as a nursing home.

The U.S. Department of Housing and Urban Development (HUD) provides critical housing resources to low income elderly households. More than one-third (37 percent) of the approximately 5 million households receiving housing assistance from HUD are headed by an elderly person (defined by HUD as at least age 62). Indeed, just over one-quarter of elderly households leaving HUD-assisted housing between 2000 and 2008 were aged 85 or older when they left. HUD would like to learn more about the demographics of elderly residents the agency assists, the ages at which these residents leave assisted housing, and the strategies that could enhance elderly households' ability to live safely and comfortably in HUD-assisted housing for as long as possible. To inform strategies to encourage and monitor such "aging in place," HUD requested that Abt Associates undertake this research on elderly households' "end of participation" (EOP) in HUD-assisted housing programs.

The research team used administrative data from HUD's longitudinal tenant characteristics file for the period 2000 to 2008 to assess the age at which elderly households leave HUD's housing programs. This report summarizes our findings, including describing patterns in age at EOP by HUD program (Section 202, Section 811/162/202D, other assisted multifamily housing, public housing, and Housing Choice Vouchers), HUD region, and selected household and neighborhood characteristics.

The research team also reviewed recent literature on aging in place. The review consists of three topic areas: personal factors that affect nursing home admission; program models of interventions to maximize aging in place; and data elements that could be collected to help HUD assess efforts to promote aging in place in HUD-assisted housing.

This report presents the findings of the research. Key findings include the following:

• Across all HUD-assisted housing programs, the average age at which elderly households leave assisted housing is 78 years.

• The average age at end of participation (EOP) is highest for the Section 202 and other assisted multifamily program types (79 years) and lowest for vouchers (76 years).²

• A sizeable share of elderly households stays in assisted housing until an advanced age. Across all program types, 27 percent of elderly households who left during the study period were at least age 85 at

¹ U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Disability, Aging and Long-Term Care Policy, August 2006.

² The average for the Section 811 program type is actually lowest at 71 years, but represents a very small share (less than 1 percent) of elderly households who exited HUD housing. In this report, we include the Section 811 program type findings in our tabulations but do not generally comment on them in the text because they represent so few exits.

exit. The proportion staying until at least age 85 was highest in the other assisted multifamily program type (30 percent) and lowest in the voucher program type (21 percent).

• Households headed by a woman, by someone who does not have a disability, and who is white stay until more advanced average ages by two to four years than households headed by a male, someone who has a disability, or is a member of a minority group. The proportion that stays until at least age 85 is much higher for women than men (30 percent vs. 16 percent) and also for whites compared to members of minority groups (32 percent for whites vs. 19 percent for blacks, 20 percent for Hispanics, and 23 percent for other minority groups.)

• Households made up of a single individual stay until an older average age (76 years) compared to households with more than one person (72 years).

• When we look at Census data on neighborhood poverty rates, we find that elderly households who were living in assisted housing in low poverty neighborhoods were older on average at exit (79 years) than the average age of those who left housing in medium or high poverty neighborhoods (77 and 76 years, respectively). The proportion of households who exit at age 85 or more declines as poverty rate rises, from 32 percent in low poverty neighborhoods to 24 percent in medium poverty neighborhoods to 19 percent in high poverty neighborhoods.

• Housing occupied primarily by the elderly seems to have greater success retaining residents until more advanced average ages compared to housing occupied primarily by non-elderly people, even in high poverty neighborhoods.

• Our literature review reports recent research results on identifying risk factors that may contribute to early departure from independent housing, including age, social connections, and medical and psychiatric issues. We also report lessons from the literature on key elements of aging in place strategies and program models that could be adapted to HUD-assisted housing. We suggest ways to use current reporting to monitor progress, as well as suggesting additional elements that would help HUD gage improvements in aging in place.

The remainder of the report is organized as follows. In Chapter 1, we review the sources of data used in the administrative data analysis and our methodology for analyzing the administrative data. Our findings are presented in Chapter 2, and Chapter 3 presents the results of the literature review. In Chapter 4, we provide a summary of the results and suggest areas for further research. Supplemental tables are attached in Appendix A.

Chapter 1: Data Sources and Methodology

1.1 Data Sources

The principal sources of HUD data for this analysis were from the HUD Office of Public and Indian Housing's PIC (PIH Information Center) data and the HUD Office of Housing's TRACS (Tenant Rental Assistance Certification System) data. The PIC and TRACS data together cover the overwhelming majority of households assisted by HUD's rental assistance programs.

PIC is an electronic information system that allows local housing agencies to submit programmatic, financial, and household-level tenant information for participants in housing programs managed by HUD's Office of Public & Indian Housing, including public housing, the Housing Choice Voucher (HCV) program, and the Section 8 Moderate Rehabilitation program. The PIC data represent annual snapshots of the program participants. The portion of the PIC data that is relevant to this task is the module of information collected by Form HUD-50058. It contains a wealth of demographic and location information on all household members residing in subsidized housing units. Each record represents an assisted household. Key data elements that are particularly useful for this study include the household head's date of birth, gender, race/ethnicity, disability status, household size, HUD program type, and project address.

TRACS data are maintained by the Office of Housing. TRACS is a parallel electronic system at HUD that collects information on households assisted by programs administered by the Office of Housing. The portion of data relevant to this task is collected through Form HUD-50059. TRACS includes many of the same variables available from the PIC data. While many of the assisted households in the PIC data are users of Housing Choice Vouchers, participants of programs covered by the TRACS data are all tenants of project-based housing assistance programs including the Section 202 program and a number of other multifamily housing programs that serve elderly and non-elderly residents.

HUD's Office of Policy Development & Research (PD&R) has maintained a longitudinal version of the research data file that contains the universe of records from both from PIC and TRACS, covering the period from 1997 to the present. For this study, we used records from the longitudinal file that cover years 2000 to 2008.

In addition, to explore the correlation between household age at program exit and neighborhood characteristics, the study team used census tract-level data from the 2000 Census' Summary File 3 (SF3). The demographic variables we used to characterize the neighborhood surrounding each of the HUD-assisted housing units included: number of households with incomes below the poverty line, number of households with a head of household aged 65 or older, number of households who are members of racial/ethnic minority groups, number of female-headed households with children, and number of housing units occupied by renters.

1.2 Methodology

The records in PD&R's longitudinal analysis file represent annual (December) snapshots of households assisted by HUD's rental assistance programs. Each record represents the status of a household in December each year. Over the years, new household records were added to the database as new participants entered HUD-assisted housing. At the same time, other households exited the housing assistance programs. These changes in participant status are reported in the database by the Action Type variable (trans_type). This is a key data element for our research. Specifically, in both the PIC and

TRACS systems, newly entering households are indicated by trans_type=1 (new admission or initial certification), while program exits are coded as trans_type=6 (end of participation or program termination). In addition, in TRACS, trans_type=5 refers to move-outs. These are also treated as exits.

Identifying Program Exits

The study team found that the Action Type variable (EOP flag) was populated and logically consistent over the study period. However, when we used the unique household identifier and program admission date to track each household's status year by year over the study period, we found that for about half the cases, households apparently exited without an EOP flag. That is, the household's final record was prior to the end of the study period (2008) but the household did not have an Action Type of "end of participation" (trans_type=6) or (for TRACS only) move-out (trans_type=5) as its final status. For these households, we used the "record truncation" method to estimate exit; that is, we assumed exit at the time of the last household record. Thus, for example, a household who had records for 2000-2005, had no further records, and had an Action Type other than "end of participation" in 2005 was counted as exiting the program in 2005 under this "record truncation" assumption.

These two flags—EOP action type and record truncation—were combined to create a single household exit flag. Thus, if a household had an EOP flag or the record truncation flag on its final record, the household was assumed to have exited the program. More specifically, a household was assumed to have exited a program if the last record had an Action Type of program exit (trans_type=6) regardless of the year or if the final record was prior to 2008 (the end of the study period).

Households with a truncated exit type primarily had an action type of "Annual Recertification" or "Interim Recertification." The remaining truncated exits had small counts and were spread relatively evenly among the remaining action types.³

Exhibit 1-1 tabulates the distribution of household exits identified by the EOP flag versus the "record truncation" method, separately by program type and reporting year. It shows that for the TRACS data, a sizable number of the exits were identified by the "record truncation" method. The rate was almost half in some years for the other multifamily program type. In contrast, for the PIC data, the majority of the exits were identified by the EOP flag. Given that the rate of program exits appears to be relatively stable over time, we are reasonably confident that the truncation method neither overstates nor understates program exits enough to be concerning.

³ We also found that a notable proportion of households in the TRACS data (36 percent) had a zero for action type in 2008. Zero action is not defined in the data dictionary from HUD, but we assumed these households did not exit.

Exhibit 1	-1: Distributio	on of Househ	old Exits Ide	ntified by the	EOP Flag an	d Record Tru	incation Me	thod					
			TRAC	S Data			PIC Data						
	All Sect	ion 202	All Sect	ion 811	All Other Multif		Public	Housing	Vou	chers			
Year	% HH exits identified by EOP flag	% HH exits identified by truncation	% HH exits identified by EOP flag	% HH exits identified by truncation	% HH exits identified by EOP flag	% HH exits identified by truncation	% HH exits identified by EOP flag	% HH exits identified by truncation	% HH exits identified by EOP flag	% HH exits identified by truncation			
2000	79%	21%	79%	21%	65%	35%	66%	34%	68%	32%			
2001	66%	34%	68%	32%	52%	48%	51%	49%	59%	41%			
2002	69%	31%	66%	34%	52%	48%	87%	13%	77%	23%			
2003	79%	21%	77%	23%	73%	27%	89%	11%	79%	21%			
2004	63%	37%	56%	44%	52%	48%	90%	10%	84%	16%			
2005	82%	18%	78%	22%	75%	25%	89%	11%	84%	16%			
2006	79%	21%	78%	22%	73%	27%	91%	9%	86%	14%			
2007	74%	26%	67%	33%	70%	30%	73%	27%	73%	27%			
2008	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%			

For each annual extract, there are a very small number of households (less than 1 percent) with multiple records per household ID. We kept only the last record per household based on the date of action indicated in the database. In addition, over the study period, a small number of households (less than 1 percent) contain multiple records of entry and end of participation (exits). Apparently, these households exited the program and then re-entered the program again at a later time. For the purpose of this analysis, we counted only the last program exit.

Identifying Housing Type

For this analysis, HUD is particularly interested in aging in place among elderly households (defined as household heads who are age 62 or older), whether they live in elderly housing or not. However, HUD staff also expressed interest in looking at differences in age at end of participation for tenants in elderly public or multifamily housing compared to housing not limited to the elderly.

Unfortunately, there is no variable in HUD's tenant-level administrative database to identify whether a household lives in elderly housing. In consultation with HUD, we developed rules for defining housing primarily occupied by elderly households. We can assume nearly all residents of Section 202 housing are elderly.⁴ To determine whether or not a tenant lives in elderly public housing or other multifamily housing built primarily to serve the elderly, we grouped the households by HUD project code for each annual data extract and tabulated the ages of heads of household for each project code to determine the proportion of households who are age 62 or older.⁵

We then established thresholds for identifying housing occupied primarily by elderly households. There were relatively few public housing developments with high concentrations of elderly tenants, so we had to set the threshold relatively low. For public housing, if more than 60 percent of heads of household in a project are elderly, we designated the project as "primarily elderly occupied" for the purposes of this analysis. For other HUD-assisted, privately owned multifamily projects, if more than 80 percent of heads of household are elderly, the project was designated as "primarily elderly occupied" in this study. This distinction does not apply for housing in the private market. These households have tenant-based assistance that they may use to rent housing in the private market. These tenants are not necessarily living in multifamily housing, and even if they are, data for unassisted households is not available.

After the elderly housing flag was created, we selected from the longitudinal analysis file all household heads who were age 62 or older at any time during the 2000-2008 study period. This included some household heads who were 61 or younger at the time of program admission. This serves as the study's analysis file.

1.3 Characteristics of the Analysis File

We examined the age at exit of these elderly households separately by HUD program type. Our definition of HUD program type was based on a combination of the Program Type variable in the HUD database, plus the project code and contract number variables. The categories are:

⁴ Some older Section 202 projects may permit admission of non-elderly applicants who have disabilities.

⁵ Project code for households assisted by FHA's multifamily programs represents the FHA project number. It is possible that multiple FHA project numbers can be associated with a project. HUD staff provided the study team with a crosswalk file to identify projects with multiple project codes. However, we found that using the crosswalk file to group the project codes did not make an appreciable difference in the overall project counts.

• *All Section 202.* This includes the PRAC Section 202 and the older Section 202 with a Section 8 rental assistance contract.

• *All Section 811.* This includes the PRAC Section 811, Sec 202/162 PRAC, and older Section 202/811.

• *All Other Assisted Multifamily Housing.* This includes the Section 8 (excluding the Section 202 and 811 identified in the previous categories), Rent Supplement, RAP, Section 236, and Below Market Interest Rate (BMIR) programs.

• Public Housing.

• Housing Choice Vouchers.

The distribution of households across all program types by reporting year is presented in Exhibit 2-2 below. It is worth reiterating that, because of the database structures, each row of numbers in the exhibit represents an annual snapshot of households assisted by HUD during the referenced year. For example, the exhibit shows that as of December 2008, there were about 4.9 million households assisted by HUD's rental assistance programs.

The largest share of households was served in the voucher program type, with some 2.1 million households (44 percent of the total). The other multifamily assisted and public housing programs served the next largest shares, with 26 percent and 23 percent of assisted households respectively. Section 202 served a small share of all households (about 5 percent), but is a key provider of housing for the elderly. The Section 811 category, which also includes the earlier Section 162 and 202D programs, serves just 1 percent of all assisted housing households. These programs are targeted to non-elderly persons with disabilities. Applicants must be non-elderly (under age 62) at program admission, but they may continue living in the Section 811/162/202D housing after they reach age 62.

Exhib	it 1-2: Nu	mber o	f HUD-A	ssisted	d Househol	lds by	Program Ty	ype an	d Year: 200	0-2008		
					HUD Prog	ıram Ty	ре					
	All Sec	202	All Sec	Multifamily					Vouche	ers	All	
Year	Count	Row %	CountRow %CountRow %CountRow %								Count	Row %
2000	201,378	6%	14,217	0%	1,181,807	33%	898,614	25%	1,297,050	36%	3,593,066	100%
2001	211,527	5%	16,169	0%	1,215,362	30%	1,021,558	25%	1,650,871	40%	4,115,487	100%
2002	231,463	6%	19,498	0%	1,312,760	32%	855,538	21%	1,646,608	40%	4,065,867	100%
2003	227,384	5%	19,613	0%	1,158,245	27%	965,279	23%	1,878,144	44%	4,248,665	100%
2004	246,941	6%	23,242	1%	1,315,369	29%	1,021,214	23%	1,875,670	42%	4,482,436	100%
2005	259,935	6%	26,464	1%	1,371,711	30%	1,045,346	23%	1,919,208	41%	4,622,664	100%
2006	250,689	5%	26,639	1%	1,284,682	27%	1,154,803	24%	2,069,416	43%	4,786,229	100%
2007	259,793	5%	30,371	1%	1,356,641	26%	1,167,565	23%	2,291,713	45%	5,106,083	100%
2008	255,021	5%	30,198	1%	1,303,357	26%	1,163,722	23%	2,171,348	44%	4,923,646	100%

The distribution of HUD-assisted projects looks somewhat different from the distribution of households, as shown in Exhibit 1-3 below. We have excluded vouchers from this exhibit because these tenant-based subsidies are not associated with specific projects. The number and percent of projects by reporting year within our study period for the remaining program types is presented in the exhibit.

As of the end of 2008, the public housing stock made up 31 percent of the HUD-assisted projects while other assisted multifamily housing made up about 36 percent.⁶ While the Section 202 program only serves about 5 percent of HUD-assisted households (as noted above), in 2008 the program accounted for about 23 percent of the overall project count.

Exhibit 1-	3: Numbe	er of HUD)- Assist	ted Proje	ects by Pro	ogram Ty	/pe and Y	ear: 200	0-2008		
	A 11 C -	- 000	A II C.	- 044	All Other		Dublic U				
N	All Sec 202		All Sec 811		Multifamily		Public H		All Count Dour %		
Year	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	
2000	4,675	16%	1,206	4%	10,274	35%	13,326	45%	29,504	100%	
2001	4,850	16%	1,344	4%	10,313	34%	13,451	45%	30,174	100%	
2002	4,962	17%	1,504	5%	10,200	34%	12,541	42%	29,611	100%	
2003	5,083	17%	1,668	6%	9,281	32%	13,061	45%	29,148	100%	
2004	5,278	17%	1,883	6%	9,650	32%	13,397	44%	30,237	100%	
2005	5,326	18%	2,015	7%	9,482	31%	13,365	44%	30,211	100%	
2006	5,393	18%	2,202	7%	9,005	30%	13,769	45%	30,373	100%	
2007	5,552	18%	2,414	8%	8,979	29%	14,134	45%	31,081	100%	
2008	5,478	23%	2,476	11%	8,389	36%	7,201	31%	23,547	100%	

Exhibit 1-4 tabulates the exits from HUD-assisted housing by year, including exits from projects that meet our criteria for elderly occupancy housing and those that we designated as primarily non-elderly housing. Both elderly and non-elderly households are included in this exhibit. The percentage columns represent the exit rate among households of the respective program type and reporting year. For example, in 2000 a total of 17, 437 households assisted by the Section 202 program exited the program. They represented 9 percent of all household served in Section 202 projects in that year.

⁶ Although the number of public housing projects appears to have dropped substantially from 2007 to 2008, this was not actually the case. In that year, HUD's Office of the Public and Indian Housing (PIH) introduced asset management reform which resulted in changes to the ways costs are attributed to public housing developments. As part of the reforms, individual projects may be grouped together for cost allocation purposes. HUD counts each group as one project, resulting in an overall reduction in the total number of projects in the public housing stock.

Exhibi	t 1-4: All	House	eholds E	xited b	y Progra	т Тур	e and Yea	ar: 200	0-2008							
		Program Type														
Year	Year All Sec 202		All Sec 811		All Other Assisted Multifamily		Public Ho	ousing	Vouchers		All					
	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited				
2000	17,437	9%	1,213	9%	151,483	13%	151,400	17%	173,519	13%	495,052	14%				
2001	26,198	12%	2,161	13%	223,387	18%	156,537	15%	202,927	12%	611,210	15%				
2002	35,788	15%	3,334	17%	317,500	24%	130,701	15%	230,218	14%	717,541	18%				
2003	24,055	11%	2,385	12%	167,245	14%	117,044	12%	186,409	10%	497,138	12%				
2004	20,912	8%	2,408	10%	174,228	13%	136,019	13%	203,113	11%	536,680	12%				
2005	40,834	16%	4,876	18%	290,361	21%	149,499	14%	235,509	12%	721,079	16%				
2006	29,844	12%	3,826	14%	212,996	17%	170,236	15%	162,356	8%	579,258	12%				
2007	37,222	14%	5,584	18%	265,103	20%	185,140	16%	382,920	17%	875,969	17%				
2008	439	0%	36	0%	18,342	1%	146,496	13%	206,016	9%	371,329	8%				
Total Across Years	232,729	11%	25,823	13%	1,820,645	16%	1,343,072	14%	1,982,987	12%	5,405,256	14%				

The sudden drop in exits in 2008 for Section 202, Section 811, and other assisted multifamily program types was an artifact of the truncation of the data available for this analysis. Because 2008 is the last year of the HUD data available, we were limited to using the Action Type variable (EOP flag) alone to identify exits and were not able to identify other exited households. This artifact did not appear to affect the count of exits for public housing and vouchers.

From all the households that exited HUD-assisted housing, we next identified those who were elderly at the time they left. Exhibit 1-5 presents the exit rates and distribution of these households by exit year and program type. This subset of approximately 1.4 million elderly households makes up our analysis universe for this research.

It is interesting that the annual exit rates among elderly households were almost identical to those among all households. In Exhibit 1-6, we show the row percentages of these households to show how exits are distributed among the HUD programs each year. For example, it indicates that in 2000 the majority of elderly household exits were in the other assisted (35 percent) and public housing (34 percent) program types.

Exhibit	1-5: Eld	erly Hou	sehold	s Exited	l by Prog	gram Ty	pe and Y	'ear: 20	00-2008			
					Progra	m Type						
Year	All Se	c 202	All Se	c 811	All Other Assisted Multifamily		Public H	lousing	Vouchers		All	
	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited	# HH Exited	% HH Exited
2000	17,437	9%	100	9%	45,710	9%	44,749	17%	25,425	13%	133,421	12%
2001	26,198	12%	206	15%	69,563	14%	47,525	15%	30,849	12%	174,341	14%
2002	35,788	15%	354	17%	93,599	18%	39,982	15%	34,863	14%	204,586	16%
2003	24,055	11%	253	11%	51,306	11%	33,695	11%	28,052	10%	137,361	11%
2004	20,912	8%	301	11%	56,695	11%	38,341	12%	29,831	10%	146,080	10%
2005	40,834	16%	575	18%	91,590	17%	41,630	13%	35,809	11%	210,438	14%
2006	29,844	12%	494	15%	65,874	13%	46,533	13%	25,448	7%	168,193	11%
2007	37,222	14%	720	19%	81,484	15%	49,724	14%	59,724	15%	228,874	15%
2008	439	0%	3	0%	3,204	1%	35,080	10%	30,160	8%	68,886	4%
Total Across Years	232,729	11%	3,006	12%	559,025	12%	377,259	13%	300,161	11%	1,472,180	12%

Exhibit	1-6: Num	ber of	Elderly	House	eholds E Prograr		y Progra	т Тур	e and Ye	ear: 200	0-2008	
Year	All Sec	: 202	All Se	c 811	All Ot Assis Multifa	ted	Public H	ousing	Vouchers		All	
	# of HH	Row %	# of HH	Row %	# of HH	Row %	# of HH	Row %	# of HH	Row %	# of HH	Row %
2000	14,625	11%	100	0%	45,710	35%	44,749	34%	25,425	19%	130,609	100%
2001	22,130	13%	206	0%	69,563	41%	47,525	28%	30,849	18%	170,273	100%
2002	29,842	15%	354	0%	93,599	47%	39,982	20%	34,863	18%	198,640	100%
2003	20,241	15%	253	0%	51,306	38%	33,695	25%	28,052	21%	133,547	100%
2004	17,626	12%	301	0%	56,695	40%	38,341	27%	29,831	21%	142,794	100%
2005	34,731	17%	575	0%	91,590	45%	41,630	20%	35,809	18%	204,335	100%
2006	25,395	16%	494	0%	65,874	40%	46,533	28%	25,448	16%	163,744	100%
2007	31,792	14%	720	0%	81,484	36%	49,724	22%	59,724	27%	223,444	100%
2008	332	0%	3	0%	3,204	5%	35,080	51%	30,160	44%	68,779	100%
Total Across Years	196,714	14%	3,006	0%	559,025	39%	377,259	26%	300,161	21%	1,436,165	100%

A Note on the All Section 811 Program Type. As shown in the exhibits above, there were very few departures of elderly households from the All Section 811 program type. We assume this is because these projects serve households that are non-elderly and disabled at admission. While households may remain

in the housing after they reach age 62, it is possible that, because of their disabilities, these households may be more likely to need a higher level of care at a younger age than among the general HUD-assisted population. We include the results of our analyses for the Section 811 program type, but do not generally comment on the results in the text because the numbers are so small.

For this analysis, we are interested in looking at end of participation (EOP) for elderly households living in housing occupied primarily by people who are elderly compared to elderly households living in mixed occupancy housing; that is housing occupied by both elderly and non-elderly households. Again, we have dropped the voucher program type, because these are households using tenant-based assistance that is not associated with a particular project.

In Exhibit 1-7, we report the counts of households who left housing projects occupied primarily by elderly households and those who left projects primarily occupied by non-elderly tenants. As expected, a large majority (89 percent) of households who left Section 811 projects had been living in primarily non-elderly housing. Approximately two-thirds (66 percent) of the households that left other assisted multifamily housing had been living in primarily non-elderly projects while the remaining one-third were in primarily elderly projects. Just over half (58 percent) of elderly public housing residents were living in primarily non-elderly developments and the rest (42 percent) were living in primarily elderly public housing.

The exhibit also shows the average age at EOP for departing elderly households in each housing program type. Leaving out the All Section 811 program type, the average age for households leaving primarily elderly housing ranges from 76 to 80 years. In the next chapter, we take a closer look at patterns in average age at EOP and at evidence of aging in place in HUD-assisted housing as indicated by retention of tenants to at least age 85.

Type: 2000-2008	8									
				Progr	am Type					
Type of Project	All Sec 202				All Ot Assis Multifa	ted	Public H	ousing	All	
	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
Primarily Family Occupancy			2,670	89%	366,810	66%	218,168	58%	587,648	50%
Avg Age		•	71	0370	78	0070	75	5070	76	5070
Primarily Elderly Occupancy	232,729	100%	336	11%	192,215	34%	159,091	42%	584,371	50%
Avg Age	79		78		78		80		80	
All	232,729	100%	3,006	100%	559,025	100%	377,259	100%	1,172,019	100%

Exhibit 1-7. Count of Elderly Households Exited by Program Type and Project Occupancy Type: 2000-2008

Chapter 2: Findings

This chapter presents the findings of our analyses of administrative data on end of participation (EOP). We report patterns in EOP across HUD regions and program types as well as across different household and neighborhood types. The key indicators we emphasize are the average age at EOP and the proportion of elderly residents who stay until at least age 85. The latter analyses help inform the extent to which HUD assisted programs are retaining tenants until more advanced ages.

A note on data presentation: In Section 3.1 below, we present a detailed table of the number and percent of households in age categories, followed by a summary by average age at EOP. In the remainder of this chapter, we have tabulated the proportions of households leaving at age 85 or more. Additional detailed tables showing the age categories may be found in Appendix A.

2.1 EOP for All Program Types

Average age at EOP for all program types is 78 years, as shown in Exhibit 2-1. Across programs, the average ranges from a low of 76 years for the voucher program type to a high of 79 years for the Section 202 and other assisted multifamily housing program types.

A sizeable share of elderly households stays in assisted housing until an advanced age. Across all program types, 27 percent of elderly households who left during the study period were at least age 85 at exit. The proportion staying until at least age 85 was highest in the other assisted multifamily housing program type (30 percent) and lowest in the voucher program type (21 percent).

Exhibit 2-1	Age at	EOP for	All Pro	gram Ty	/pes							
					-		Progra	am Type				
	AI	I	All Se	ec 202	All S	ec 811	All Other Multif		Public H	lousing	Vouc	hers
Age at EOP	# of HH	Column %	# of HH	Column %	# of HH	Column %	# of HH	Column %	# of HH	Column %	# of HH	Column %
62 to 64	122,897	9%	8,044	4%	774	26%	39,473	7%	36,740	10%	37,866	13%
65 to 69	212,106	15%	23,746	12%	803	27%	73,387	13%	60,370	16%	53,800	18%
70 to 74	224,928	16%	30,576	16%	506	17%	83,118	15%	61,451	16%	49,277	16%
75 to 79	249,848	17%	37,015	19%	363	12%	96,434	17%	65,654	17%	50,382	17%
80 to 84	255,999	18%	39,822	20%	284	9%	104,333	19%	64,017	17%	47,543	16%
85 to 89	212,925	15%	33,489	17%	171	6%	92,010	16%	51,351	14%	35,904	12%
90 to 94	121,089	8%	18,661	9%	76	3%	53,938	10%	28,818	8%	19,596	7%
Over 95	36,373	3%	5,361	3%	29	1%	16,332	3%	8,858	2%	5,793	2%
All Households	1,436,165	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%	300,161	100%
Avg Age	78		79		71		79		77		76	

2.2 Regional Differences in EOP

The average age at EOP varies by HUD region, as shown in Exhibit 2-2. The average age at EOP across all programs, shown in the first column, ranges from 76 years for the Southwest to 79 years for New

England. Within program types (excluding the All Section 811 category), the lowest average ages at EOP are in the voucher program type where households in the Mid-Atlantic, Southeast, Southwest and Northwest leave at an average age of 75. As expected, the highest average ages at EOP tend to be in the All Section 202 program type. The All Section 202 program type for the New York/New Jersey HUD region has the highest average EOP at 81 years.

Exhibit 2-2. Average	Exhibit 2-2. Average Age at Exit of Elderly Households by HUD Region: 2000-2008											
				Program Ty	ре							
HUD Region	All	All Sec 202	All Sec 811	All Other Assisted Multifamily	Public Housing	Vouchers						
New England	79	80	73	80	78	77						
New York/New Jersey	78	81	70	79	77	78						
Mid Atlantic	78	80	71	79	76	75						
Southeast/Caribbean	77	78	72	77	76	75						
Midwest	78	80	71	79	78	76						
Southwest	76	78	71	76	77	75						
Great Plains	79	80	71	79	79	76						
Rocky Mountain	78	78	71	79	79	76						
Pacific	78	79	70	79	76	76						
Northwest	77	78	68	78	76	75						
Unknown	77	78	72	76	77	75						

There is even more variation across HUD regions in the proportion of households who leave HUDassisted housing at age 85 or more, as shown in Exhibit 2-3. Across all regions and program types, the Southwest has the lowest rate of EOPs at age 85 or more, at 15 percent for the voucher program type. The Section 202 program type in the New England region has the largest proportion of households leaving at age 85 or more at 35 percent.

The ranges within program type are larger than we observed in average ages, indicating there are regional differences in the experience of HUD-assisted housing in retaining older residents. For example, in the other assisted multifamily housing program type, the proportion of EOPs at age 85 or more ranges from a low of 22 percent in the Southwest to a high of 34 percent in New England. The New England and New York/New Jersey regions seem to have a particularly high rate of voucher holders staying until advanced ages, with 25 and 27 percent respectively. For public housing, EOPs at age 85 or more range from just 19 percent of exits in the Pacific region to 31 percent in the Rocky Mountain and Great Plains regions.

				Program Type)	
HUD Region	All	All Sec 202	All Sec 811	All Other Assisted Multifamily	Public Housing	Vouchers
New England	31%	35%	10%	34%	26%	25%
New York/New Jersey	28%	33%	8%	30%	23%	27%
Mid Atlantic	26%	30%	9%	31%	20%	18%
Southeast/Caribbean	22%	25%	12%	24%	20%	17%
Midwest	29%	31%	8%	31%	27%	21%
Southwest	21%	25%	7%	22%	23%	15%
Great Plains	30%	32%	9%	33%	31%	21%
Rocky Mountain	28%	28%	9%	31%	31%	22%
Pacific	24%	27%	9%	28%	19%	22%
Northwest	22%	26%	4%	26%	20%	17%
Unknown	24%	27%	12%	18%	25%	17%
All	26%	29%	10%	29%	24%	21%

.

The differences across HUD regions are interesting, but difficult to explain. It may be that average life expectancy differs by region. It may also be that nursing home admission criteria or the availability of other affordable living situations with higher levels of care (such as assisted living) may differ by region. Nursing home data reported in 2008 show that differences exist in the age of residents by region. The proportion of residents over the age of 85 is highest in the Midwest (32 percent of all nursing home residents who were 85 and older) and the South (31 percent). Just over one-quarter of all nursing home residents who were at least 85 were living in the Northeast region while 13 percent were living in nursing homes in the West⁷

The U.S. Census data reveal a similar geographic distribution of the older population in the U.S. Approximately 37 percent of people over the age of 65 and 34 percent of people over age 85 live in the South. The Midwest accounts for 23 percent of both the population over 65 and the population over 85.⁸ Only 19 percent of the over-65 population and 21 percent of the over-85 population live in the Northeast. These distributions may drive the regional differences seen in departures from HUD-assisted housing. The availability of housing- or community-based assistance to support aging in place may also differ. Additionally, the availability of such supports would depend on a number of factors that could include the concentration of HUD-assisted housing staffed by service coordinators and the availability of state or Medicaid-funded community-based supports available to low income seniors.

http://www.cdc.gov/nchs/data/nnhsd/Estimates/nnhs/Estimates Demographics Tables.pdf#Table01

Centers for Disease Control and Prevention, National Nursing Home Survey 2004, Nursing Home Current Residents Report, June, 2008.

⁸ U.S. Census Bureau, 2008 American Community Survey, 1 year estimates. Table B01001.

2.3 EOP and Household Characteristics

This section reviews the findings on EOP and household characteristics. We begin by looking at average ages at EOP for heads of households by gender, disability status, and race of the head of household across program types. We then review findings on the role of household characteristics in the proportion of households that stay to at least age 85 across program types. Finally, we look at patterns in EOP based on household size, comparing households with only one member to those with more than one member.

Gender, Disability Status and Race

Households headed by someone who is female, does not have a disability, and who is white have higher average ages at EOP than those headed by someone who is male, has a disability, or is a member of a minority group, as shown in Exhibit 2-4.

Households with a female head stay until they are two to four years older on average than those headed by a male. This is not surprising and could be explained simply by the longer average life expectancy of women compared to men. The difference in age at EOP among households headed by someone who is white have a similar magnitude of difference – two to four years – compared to those who are members of minority groups. The differences among minority groups (blacks, Hispanics and other) are small.

Disability appears to play a larger role in average age at EOP, especially in the Section 202 program where disabled heads leave 15 years earlier on average, and in the other multifamily assisted housing programs where disabled households leave 14 years earlier on average. This may be an artifact of the way disability status is captured, however. Elderly heads of household who enter Section 202 or other multifamily assisted housing after age 62 are classified as elderly, whether they have a disability or not. Many likely do have some sort of disability, but this goes unreported. The gaps between average age at EOP for households with and without a disabled head of household are considerably less in the public housing and voucher programs (four to five years).

Exhibit 2-4. Average Age at EOP by Characteristics of Heads of Household									
	Average Age at EOP (years)								
	Gender		Disabili	ty Status		Race			
Program Type	Male	Female	Disabled	Non- disabled	White, Non- Hispanic	Black Non- Hispanic	Hispanic	Other	
All Program									
Types	75	79	73	79	79	76	76	78	
All Section 202	76	80	64	79	80	77	78	79	
All Sec 811	70	72	63	72	70	73	75	71	
All Other Assisted Multifamily	76	80	67	79	80	76	76	78	
Public Housing	75	78	74	79	79	76	76	76	
Vouchers	74	77	74	78	77	74	76	74	

The patterns in HUD-assisted households who exit at age 85 or more is similar to what we saw in the data on average age at EOP above: households headed by women, by a non-disabled person, and by a white are more likely to be at least age 85 at exit. The differences in proportions based on the characteristics of the household vary somewhat more dramatically, however, as shown in Exhibit 2-5. For example, almost twice as many female–headed households stay until age 85 or more compared to male-headed households across almost all program types. The exception is households leaving the voucher program type where the difference in proportions is a little smaller. The differences based on disability status are again quite large, probably because of the under-reporting of disability among the elderly noted above. And, again, the differences are smaller in the public housing and voucher programs than they are in the Section 202 and other assisted multifamily housing programs.

The proportion of households headed by someone who is white and at least age 85 at exit is 9 to 14 percentage points higher than the proportion of households headed by members of minority groups who stay to a similarly advanced age. The differences among minority groups are generally nominal, although Hispanics in the voucher programs do seem somewhat more likely to stay at least to age 85 (21 percent) compared to blacks or members of other minority groups (15 percent for each group.)

Exhibit 2-5. Household Characteristics and EOP of Age 85 or More									
	Gender		Disability Status		Race				
Program Type	Male	Female	Disabled	Non- disabled	White, Non- Hispanic	Black Non- Hispanic	Hispanic	Other	
All Program Types	16%	30%	13%	30%	32%	19%	20%	23%	
All Section 202	19	33	2	30	32	22	23	26	
All Sec 811	5	11	0	10	8	11	18	8	
All Other Assisted Multifamily	17	33	4	30	33	19	19	25	
Public Housing	14	28	13	28	30	18	19	19	
Vouchers	13	23	13	28	24	15	21	15	

The average life expectancy of a U.S. senior citizen at 65 years is 18.6 years. That is to say that once a person becomes a senior citizen, on average, that person will live to be about 84 years old. This is roughly 5 years higher than the average age at EOP. By gender, women who reach age 65 have a higher life expectancy at 84.8 years compared to men, who have an average life expectancy of 82.1 years. Life expectancy varies by race. Black men experience the lowest life expectancy of 80.2 years, followed by white men with an average life expectancy of 82.3 years. White women have the highest life expectancy of 84.9 years, and black women have a life expectancy 83.7 years. The differences in life expectancy that exist between men and women (2.7 years) are similar to those that exist for EOP for all programs (2-4 years). ⁹

According to the National Nursing Home Survey, there are similar gender and race differences among the nursing home resident population. Approximately 45 percent of all nursing home residents are over the age of 85. The gender divide of residents over 85 is quite wide: 28 percent of males are over 85 compared with 52 percent of females. However, the gender composition of residents between the ages of 75 and 84

⁹ U.S. Census Bureau, Statistical Abstract of the United States: 2011. Tables 105, 102, 103.

reveals a narrower gap: about 33 percent of men are in this age range compared to 31 percent of females. This is likely due to men's shorter life expectancy, although it also could be attributable to the fact that women live independently longer than do their male counterparts.¹⁰

A higher proportion of white nursing home residents are over the age of 85 than members of minority groups. Approximately 48 percent of white residents are over age 85 compared with 30 percent of black residents and 25 percent of Hispanic residents. While Hispanic residents overall are underrepresented among the nursing home resident population (4 percent of all nursing home residents), they are especially underrepresented among those over 85 (2 percent). Black residents on a whole are representative as a part of the nursing home population (13 percent of the total resident population); they are also underrepresented among those who are at least age 85 (8 percent).¹¹

Household Size and EOP

In the scope of work for this task order and in our subsequent discussions with HUD, it was suggested that households with more than one person might stay longer in HUD-assisted housing than single-person households. HUD staff speculated that one or more extra household members might indicate the presence of a care-giver. This could be an informal care-giver such as a spouse or other family member, or a hired live-in care provider. In either instance, HUD staff hypothesized that households with such support might stay longer in HUD-assisted housing than single individuals who might not have such formal or informal assistance.

We found that average age at EOP and the proportion of households that stayed to at least age 85 was lower for households with more than one person than for single-person households, as shown in Exhibit 2-6. Across all program types, single-person households were four years older at EOP on average, and were about twice as likely to leave at age 85 or later. Among programs, the differences between single and multiple person households are less substantial in the Section 202 program, where there is only a one-year average age difference and a seven percentage point difference in the proportion leaving at age 85 or later. The differences are more substantial in the other assisted multifamily, public housing, and voucher program types where there are three to four year differences in average age at EOP, and 11 to 13 percentage point differences in the proportion leaving at age 85 or later.

It is not clear why single-person households might stay to more advanced average ages. It may be that two-person households choose to leave earlier to relocate to another type of housing before they are too old for such a move. We saw earlier that women stay longer; they may also be more likely to be single householders. Alternatively, perhaps two-person households are more likely to leave HUD-assisted housing as soon as the first household member either dies or needs a higher level of care. Rather than staying behind in HUD-assisted housing, the remaining household member(s) leave also, perhaps at an earlier age than s/he might have chosen otherwise. More surviving/remaining household members might stay in Section 202 housing where there is more likely to be a service coordinator and other assistance available. This could explain why the differences by household size are less substantial in the Section 202 program type.

Among the population nationally, the age at which people enter nursing homes is lower for people who were living with family (including a spouse) prior to admission, compared to those living alone. According to the 2004 Nursing Home Care Residents data, the prior living situation of nursing home residents follows a similar trend to the EOP by household size discussed above. Of people over 65 who

¹⁰ CDC, NNHS, 2004.

¹¹ Ibid.

were living alone prior to entering a nursing home facility, 9 percent were between the ages of 65 and 74 years old, 31 percent were between the ages of 75 and 84, and 60 percent were over the age of 85 at admission. The population entering a nursing home having lived with family (including a spouse) prior to entry were much younger at admission. Approximately 14 percent were between the ages of 65 and 74, 41 percent were between 75 and 84, and 45 percent were over 85 years old at admission.

Of nursing home residents over the age of 85, fewer than 15 percent were identified as currently married. Most were widowed (72 percent), and the remainder were either divorced or never married. Interestingly, the age group that has the highest proportion of married residents was the 65-74 group, supporting the earlier hypothesis that married or two-person households may leave HUD assisted housing earlier for other housing options that can provide an additional level of support.

Whatever the circumstances, those who do remain in HUD-assisted housing after a spouse's death or move to a nursing home or elsewhere would be counted as single-person households and would have a later age at EOP. We would not have detected such changes in household composition if the head of household changed when the first member left or died. We simply looked for the last date of action for a given household in all cases.

	Household	Size = 1	Household Size >1		
Program Type	Average Age at EOP (years)	% EOP at Age 85+	Average Age at EOP	% EOP at Age 85+	
All Program Types	76	28%	72	14%	
All Section 202	79	30%	78	23%	
All Sec 811	71	10%	72	8%	
All Other Assisted Multifamily	79	30%	75	17%	
Public Housing	78	26%	74	14%	
Vouchers	77	22%	73	11%	

The findings in this section suggest that resources to promote aging in place may best be targeted to HUD-assisted housing residents who are members of minority groups and who have a disability (whether reported or not). The findings on household size are somewhat puzzling and merit further inquiry to determine the extent to which the results reflect actual differences in outcomes based on household size, or are simply an artifact of changing household composition over time. Some of this might be clarified with further analysis of the administrative data, but it may also be useful to collect information through surveys or other means to learn more about what precipitates departures from assisted housing and where elderly households go when they leave.

2.4 Neighborhood Characteristics and EOP

This section reviews the results of analyses of EOP by the characteristics of the neighborhoods where HUD-assisted housing is located. As noted in the scope of work for this task order, socio-economic status is known to have independent effects on morbidity and mortality. We did not have the time or resources under this task order to analyze household incomes among HUD-assisted tenants, but the longitudinal tenant data file is linked to Census data, allowing analyses of selected characteristics of the census tracts where the housing is located. The Census variables may be useful proxies not only for the characteristics

of households living in the neighborhoods, but potentially also for the level of resources available in the neighborhood to assist low income elderly residents.

Neighborhood Poverty Rates and EOP

The age at which households leave HUD-assisted housing in low poverty neighborhoods is higher, on average, than in medium or high poverty neighborhoods, as shown in the left panel of Exhibit 2-7. The poverty rate categories are defined as follows: Low poverty rate neighborhoods are census tracts with poverty rates of less than 10 percent. Medium poverty rate neighborhoods are census tracts with poverty rates from 10 percent to less than 40 percent. High poverty rate neighborhoods have poverty rates of 40 percent or greater.

Across all program types except All Section 811, average age at EOP declines as neighborhood poverty rate goes up. The averages across programs reflect patterns seen in other analyses, with lower averages in the voucher and All Section 811 program types. The averages in the remaining programs – all Section 202, public housing, and other assisted multifamily housing – are a little higher and are similar to each other.

The proportion of HUD-assisted residents who stay until at least age 85 differs substantially by neighborhood poverty rate, as shown in the right panel of Exhibit 2-7. The proportion of households who exit at age 85 or more declines from 32 percent in low poverty neighborhoods, to 24 percent in medium poverty neighborhoods, to 19 percent in high poverty neighborhoods. This may reflect both the greater health challenges faced by households with lower incomes and the lower level of resources available to assist older households to age in place in the neighborhoods where they live.

We also see that the proportion of households leaving the public housing and voucher programs at age 85 or more is lower than for the other project-based programs, especially in high poverty neighborhoods. Only 17 percent of elderly households are age 85 or more at departure from tenant-based and public housing in high poverty neighborhoods, while 21 to 23 percent of households exiting other multifamily assisted housing and Section 202 housing (respectively) in high poverty neighborhoods are age 85 or more at EOP.

Exhibit 2-7 Age at EOP and Neighborhood Poverty Rates							
	Average Age at EOP (years)			Percent Exiting at Age 85+			
Program Type	Low poverty (<10 percent)	Medium poverty (10 - <40 percent)	High poverty (40+ percent)	Low poverty (<10 percent)	Medium Poverty (10 - <40 percent)	High Poverty (40+ percent)	
All Program Types	79	77	76	32%	24%	19%	
All Section 202	81	79	78	35%	28%	23%	
All Section 811	71	71	75	9%	9%	17%	
All Other Assisted Multifamily	80	78	76	36%	28%	21%	
Public Housing	79	77	75	31%	22%	17%	
Vouchers	77	75	75	24%	19%	17%	

Average age at EOP for neighborhoods with other characteristics associated with lower socio-economic status show similar patterns. Average age at EOP is one to two years younger for households living in neighborhoods with high concentrations of residents who are members of minority groups and where

more than half of households are made up of female heads of household with children. The averages differ a little less when we compare neighborhoods where more than half of units are occupied by renters compared to neighborhoods where less than half of units are occupied by renters. For All Section 202 and All Section 811, the average age at EOP is the same, and for the remaining programs the averages differ by only one year. Exhibits showing these results appear in Appendix A.

EOP, Occupancy Type, and Neighborhood Characteristics

We also looked at how EOP for elderly households differed by neighborhood characteristics for exits from housing primarily occupied by non-elderly households compared to housing occupied primarily by the elderly. As shown in the left panel of Exhibit 2-8, we found that average age at EOP was about two to three years older for residents exiting housing primarily occupied by the elderly for each poverty level, compared to housing occupied by mixed populations of non-elderly and elderly households.

Housing occupied primarily by the elderly seems to be having relatively greater success retaining residents until more advanced average ages compared to primarily non-elderly occupancy housing, even in higher poverty neighborhoods. As shown in the right panel of Exhibit 2-8, for households leaving housing occupied primarily by the elderly in low poverty neighborhoods, the proportion of elderly households leaving at age 85 or more (37 percent) is considerably higher than the average across all programs (26 percent). Even in high poverty neighborhoods, the proportion of households staying in elderly occupancy housing until at least age 85 is comparable to the average across all programs (25 percent.)

Exhibit 2-8. EOP by Neighborhood Poverty Rate and Occupancy Type							
Occupancy Type and Neighborhood							
Poverty Rate	Average Age at EOP in Years	Percent of Exits at Age 85+					
Primarily Non-elderly Occupancy							
Low poverty (<10%)	78	30%					
Medium poverty (10-40%)	76	22%					
High poverty (40+%)	75	17%					
Primarily Elderly Occupancy							
Low poverty (<10%)	81	37%					
Medium poverty (10-40%)	79	30%					
High poverty (40+%)	78	25%					
All Occupancy Types							
Low poverty (<10%)	79	32%					
Medium poverty (10 - 40%)	77	24%					
High poverty (40+%)	76	19%					
All	78	26%					

These findings imply that resources to encourage and support aging in place may be best targeted to HUD-assisted households living in higher poverty neighborhoods. Coordinating interventions in ways that allow voucher holders to take advantage of development-based supports in HUD's elderly public housing and multifamily stock might also help increase average ages at EOP for households receiving tenant-based assistance.

Chapter 3: Literature Review Results

According to our analyses of HUD's longitudinal file on tenant characteristics, elderly tenants in recent years left HUD housing programs at an average age of 78 years. HUD's data do not include information on the reasons for departure or destination at exit, but we assume that some tenants die and some leave subsidized housing because they need services or supports that are not provided in their current housing. This may result in admission to a nursing home or hospital, a move to an assisted living facility, or moving in with relatives.

HUD is looking for ways to promote and monitor strategies to help elderly households remain in HUD assisted housing as long as possible. This chapter reviews recent research on strategies to help elderly people age in place. As part of this exploration, we review research on program components and promising models that contribute to aging in place among the elderly. First, we present research findings on identifying at-risk populations who are likely to benefit from aging in place strategies.

3.1 Identifying At-Risk Households

One of HUD's main aims in promoting aging in place is to help elderly households defer admission to nursing homes or other long-term care if their housing and service needs can be met in HUD-assisted housing. A number of research studies have found that at least some residents of nursing homes and other long-term care facilities have relatively limited levels of impairment. These seniors could conceivably live independently if they had access to some services in the community.

For example, according to the Federal Interagency Forum on Aging Related Statistics, 5 percent of residents in long-term care facilities (including nursing homes) in 2010 had no functional impairment. Just fewer than 12 percent report only limitations related to Instrumental Activities of Daily Living (IADLs) such as light or heavy housework, managing money, meal preparation, and shopping. Approximately 16 percent have difficulty performing only one activity of daily living (ADL) such as bathing, dressing, getting in and out of chairs, walking, or eating. The Forum concluded that some 33 percent of the long-term care population does not meet the definition of "frail elderly." However, because many senior citizens need assistance with personal care needs and daily living needs, but lack the resources to pay for them, they are institutionalized before they need to be.

There is extensive literature examining personal factors that have some predictive value for nursing home admission. The findings in the analysis of EOP in HUD's programs are in line with the research literature on nursing home placements. Elderly women who live alone and are at an advanced age are more likely to be admitted to nursing homes than other demographic groups (Young, 2003). People entering nursing homes largely do so as individuals (supporting the fact that households with more than one person stay in assisted housing longer), and they are largely women (there are few single men in subsidized housing or nursing homes).

Social factors that seem protective against nursing home placement include co-residing with children or other relatives and living close to actual or potential care givers (Kasper et al, 2010). It seems that African American and Hispanic elderly adults experienced lower nursing home placement rates than white elderly adults (Moran, 2010), and that African Americans are under-represented in nursing homes (Kasper, et al 2010). Research indicates that older members of minority groups often rely on social and familial supports when they exit housing instead of entering nursing homes (Moran, 2010).

Severe physical or psychiatric conditions have a significant effect on early nursing home admission (Luppa et al, 2010). Approximately 80 percent of the elderly population in the United States has a single

chronic condition, and 62 percent has more than one chronic condition (Vladeck et al., 2010). Residents of subsidized housing are more likely to have a chronic or disabling condition than older Americans who own their homes (IFAS, 2009). Certain health characteristics such as serious mental illness and severe physical or chronic conditions also contribute to nursing home placement at an earlier age than among seniors who do not have serious health conditions. The Center on Aging Research found that persons with serious mental illness were at an increased risk of entering a nursing home at an earlier age compared with those with no mental illness (median of 65 years compared with 80 years, respectively).

Health-related characteristics associated with a "shorter time to" nursing home admission (among patients without dementia) were functional and cognitive impairment, major depression, stroke, myocardial infarction, a low number of specialist visits, and paid home helper use (Andel et al, 2007). Understanding factors associated with early nursing home placement can prompt the providers of housing and services for elderly populations to be proactive when clients experience some of these factors. Early response may prevent further deterioration of an existing condition and encourage longer stays in independent housing.

3.2 Promoting Aging in Place

In the scope of work for this task order, HUD requested research findings on program components that promote aging in place that should be considered in developing the agency's strategies. The recent National Summit on Affordable Senior Housing and Services hosted by the American Association of Homes and Services for the Aging collected information from participants during multiple breakout sessions (National Summit on Affordable Senior Housing and Services, 2010 Summit Proceedings). One of the sessions identified essential components to a successful housing with services strategy. Some general principals identified in successful models include:

- A resident centered approach, positioned around the needs of the residents in the property;
- Resident choice regarding whether and when to use services;
- Assessment of residents and their needs at baseline;
- Service coordination or case management; and

• A set of recommended services including preventive/wellness services, assistance with home care needs, personal care needs, mental health services, oral health services and meal programs.

Research supports these and other factors in successful approaches. Perhaps the most commonly cited factor affecting the length of time elderly residents can remain in their homes is *access to quality support services* (Cohen; Wardrip; Cotrell and Carder; Golant; Vladeck et al; Sanders et al). As tenants age, their health and ability to conduct everyday activities deteriorates. Services provided to residents can be wide-reaching, from intensive medical care for chronic conditions and preventive care to home care needs, personal care needs, and other assistance with daily living activities, such as preparing meals, and transportation (Cohen, 2010). However, costly and intensive interventions are not necessarily needed in all cases. A study conducted on the health-related needs of older residents of subsidized housing found that assistance with simple housekeeping and lifting of heavy objects were two of the most widely reported unmet service needs (Cotrell and Carder, 2010). Participation in paid programs offering assistance with IADLs helped a group of study participants stay in their homes longer than others (Chen and Thompson, 2010).

One study found that just the perception of the availability of services affects the length of time a tenant believes that he or she would be able to live independently. A recent study identified a strong relationship between the perceived availability of community-based long-term care and services by respondents and the respondent's anticipation of aging in place or relocation (Tang and Pickard, 2010). A perceived awareness *of unmet needs* such as visiting nursing, transportation, meal delivery, adult day care and

personal assistance was related to both an anticipated earlier age at which the respondent believed he or she would have to move out of their independent living situation (Tang and Pickard) and longer stays in the home by study participants when compared to others (Chen and Thompson). This suggests that those who understand those needs will seek out home based or community based services to fill an identified gap. While a perceived availability of services did not alone predict the use of services, respondents did believe that they would be able to live independently longer with such knowledge (Tang and Pickard).

Informal *social networks* play an integral role in lengthening tenancy in multi-family housing for seniors. A study of family caregivers of elderly tenants in subsidized housing found that tenants relied heavily on family members, generally adult children, to help them age in place (Sanders, et al, 2010). The information collected was used to inform the development of a caregiver-training program for people with elderly family members living in subsidized housing. The response to the pilot was overwhelmingly positive, with family members feeling more equipped to help their elderly family member age in place. The study asserts that family caregiver training programs would improve the ability of senior housing properties to help their elderly tenants remain in their housing units and avoid transfers to nursing homes or assisted living facilities.

In a study of three senior housing programs in Colorado, residents did not report using many of the formal services provided them and instead relied significantly on family members. Family support was identified as a crucial part of the resident's general sense of well-being and was integral to the housing program's ability to help elderly residents age in place (AAHSA, Enterprise, 2010). In a study of the health-related needs of elderly residents of subsidized housing, social support from both family and non-family members was also found to have a positive effect on residents' physical and mental health and worked as a safety net in times of need (Cotrell and Carder, 2010).

Another factor associated with extended independence for seniors in subsidized housing is *home modification*. To age in place, many older adults will need to incorporate some accessibility features, such as lever door handles, ramps, wider doorways to accommodate wheelchairs, nonslip floor surfaces, and bathroom aids (Wardrip, 2010). A recent survey indicated that only about half of senior citizens felt that their current home would be able to accommodate them as they age (Wardrip, 2010). The accessibility of the housing unit also has an effect on a tenant's ability to integrate socially, likely due to the inability or discomfort associated with leaving the home (AAHSA, 2010). While many Section 202 and other project-based senior housing projects have incorporated elements of universal design – features that require low physical effort, have flexibility of use, are simple and intuitive (Crews and Zavotka) – programs not specifically targeted to senior citizens, such as public housing and housing leased by housing choice voucher holders, may not have these accessibility features.

A health assessment of seniors in subsidized housing discovered a number of structural problems in buildings that have contributed to falls, and areas that are not navigable by people in wheelchairs or walkers (Cotrell and Carder, 2010). This suggests that some home modifications in HUD subsidized housing could contribute to longer stays for elderly tenants who have difficulty with mobility. Ramps, lever door handles, and bathroom aids seem to be simple modifications that could be done fairly easily; wider doorways, functioning elevators, and non-slip floor surfaces could also contribute to a more socially and physically active elderly population. Both physical activity and social integration (discussed above) have been linked to longer stays in the home (Cotrell and Carder, 2010). The existence of shared or community space can also support aging in place strategies. This promotes both social interaction and provides an easy and convenient place to deliver services.

Approximately one in five adults over the age of 65 either cannot or chooses not to drive (Kershner, et al, 2007). *Accessible public transportation* is integral to maintaining independence and successfully aging in place. For those elderly adults who do not live in urban or other areas fitted with wide-reaching transit,

transportation can be a legitimate barrier to staying in the home (Wardrip, 2010). To help overcome this barrier, many communities have developed Supplemental Transportation Programs (STP). Most STP programs provide "supportive transportation" which includes door-to-door and "door-through-door" assistance (Kerschner). When needed, some programs provide an escort to remain with the passenger when they reach the destination.

3.3 Lessons from Promising Program Models

There are a number of approaches identified in the literature that assist older Americans to remain in their homes for longer periods. Recent research largely promotes strategies that connect existing housing with support services. These programs coordinate the delivery of social services either directly to the residence or to an accessible site nearby.

The most frequently cited intervention is the use of the HUD's Resident Service Coordinator Program to prevent premature institutionalization through the provision or coordination of support services to low income frail and elderly people (Golant; Cotrell and Carder; Vladeck et al; Wardrip; AAHSA; Sanders et al). These services can include meal services, transportation, housekeeping, visits from nurses, and recreational and social activities (Perl, 2009). Recently, Congress approved a series of bills to reform the Section 202 supportive housing program. As a part of that series, the legislation modified the criteria used to select applicants for new construction funding for Section 202 housing. Specifically, the criteria now identifies whether the applicant has made a clear effort to include the use of a service coordinator to oversee meal provision and home care needs of residents.¹² The roles of services for frail elderly; linking residents with those services; and monitoring and evaluating the effectiveness of services.

A 2008 study of the HUD-funded service coordinator program in subsidized multifamily housing found that property managers had a high level of satisfaction with service coordinators. More than 92 percent of property managers surveyed indicated that they agreed or strongly agreed with the statement that service coordinators enabled aging in place (Levine, 2008). The study also found that properties with service coordinators experienced a length of tenancy that was 6 months longer, on average, than residents of similar developments without service coordinators (Levine, 2008).

A number of other models have elements that could be adapted in assisted housing.

Naturally Occurring Retirement Communities (NORC) is a term that describes housing developments or neighborhoods that are age-integrated, but are made up largely of older adults. NORCs are not created or built, but evolve over time through an emigration of the job-seeking populace, while older generations remain (Vladeck, et al, 2010). While the population that resides within these communities is diverse with varying levels of needed supports, the concentration of older adults provides a natural setting for the efficient delivery of services (Cohen, 2010).

In New York City, 34 NORC programs, funded by the city and located in large and small, public and private housing developments, represent structured partnerships between the housing developments (or neighborhoods), community based health and social service providers, and other stakeholders (Vladeck, 2010). These partnerships, 10 of which are located within New York City Housing Authority public housing developments, help elderly residents to age in place through coordinated provision of services. This collaborative program led to the creation of a "Healthy Indicator in NORC Programs" initiative,

¹² Congress Approves Bills to Reform Section 202, Section 811 Programs, Housing Development Report, January 3, 2011.

which identified key health risks among the population, designed and targeted interventions for residents, and provided the infrastructure to follow up and periodically assess the changing needs of the elderly tenants. The partnership between the Housing Authorities and community based health and social service providers could likely be replicated in communities serving large numbers of elderly clients located in concentrated areas.

Co-housing. Co-housing is a term used for a residential development that has collaborative ownership and management (Cohen, 2010). The co-housing model usually includes between 15 and 35 units with shared facilities that are frequently occupied by residents who had some involvement in planning the development (Wardrip, 2010). Individual residences are often clustered around shared facilities that provide an optimal environment for the delivery of jointly purchased or managed services.

While this model may not be easily replicated in subsidized housing, some of the principals could be adapted. Many co-housing communities incorporate universal design principals into the shared and community spaces. Some programs identify levels of care neighbors are willing to provide for others (such as housework or cooking) before other arrangements are made to pay for such care (Bay Area Summit). Some co-housing programs have tenants pool their resources to hire a live-in care giver. The idea behind co-housing is that residents are involved in the planning and thus feel a greater sense of ownership over both the development and the well-being of their neighbors.

Program for All Inclusive Care for the Elderly (PACE). Operating under Medicaid and Medicare, the PACE program is an optional benefit that is available to States that choose to offer PACE under their Medicaid program (Medicare.gov). PACE is a Home and Community Based Service (HCBS) program that provides a comprehensive set of services to help frail, chronically ill, nursing home eligible elderly people remain in their homes (Carey, et al). Clients' needs are assessed by a team of doctors and nurses who then develop a care plan and deliver services. The programs provide social and medical services supplemented by in-home and referral services, depending on the client's needs.

Through this program, all types of Medicare/Medicaid services must be offered, such as primary care, nutrition counseling, transportation, meal provision, personal care, home care, nursing and inpatient care, and prescription drug assistance (Medicare.gov). Most services are provided in a single, accessible location such as senior day centers or health centers (AAHSA). PACE programs can be linked to any number of housing programs (such as Section 202, NORCs, and other Multi-Family housing or senior housing programs) either through physically locating the programs near the housing programs (AAHSA), or utilizing PACE services to provide transportation to a nearby location.

In line with recent trends toward home and community based care, and as part of the recent legislation on Section 202 housing, HUD will be providing grants to be used to convert elderly housing to a "service-enriched housing" model. In the service-enriched housing model of assisted housing, licensed third parties make supportive services such as personal care, home care, and assistance with activities of daily living available to residents. The model includes the position of service coordinator, which can be funded as an operating expense. The housing must include separate housing units for residents, each equipped with its own kitchen and bathroom. The property must also have shared or common space and other space made available for the delivery of services. Residents must have the ability to choose among services, and accept or decline all individual services.¹³

¹³ Congress Approves Bills to Reform Section 202, Section 811 Programs, Housing and Development Reporter, January 3, 2011.

3.4 Measuring Progress: Potential Data Elements and Indicators

HUD wants to promote aging in place strategies and monitor whether they are working to prolong length of stay, divert nursing home placements and hospital admissions, and ensure HUD-assisted elderly households have the support they need to remain safely and comfortably in their homes.

Monitoring EOP of elderly households is one way to capture whether the age at which elderly households in subsidized housing leave their homes is increasing, but it may not be enough. Other indicators may also inform whether progress is being made, such as:

- Longer length of time in home;
- Lowering transfers to hospitals;
- Lowering transfers to assisted living or nursing home placements;
- Improved or maintained functioning (ADLs);
- Fewer emergency room visits;
- Reducing falls; and
- Improving or maintaining social interaction/social networks

Some of these indicators could reasonably be monitored by property managers or service coordinators, but others are more sensitive because they involve private health information, or would be difficult to measure. Below we suggest some elements of a monitoring strategy.

Baseline Assessments. Much of the existing literature around aging in place and nursing home diversion recommends that there be a baseline assessment of elderly residents of subsidized housing (Care, et al; Cotrell and Carder; Golant, et al;). A baseline needs assessment would allow publicly subsidized housing programs to target resources more accurately.

HUD-funded service coordinators in Section 202 and other HUD-assisted housing are well-positioned to accomplish this, as they are already responsible for completing a Semi Annual performance report for the Multifamily Housing Service Coordinator Program.

Currently, service coordinators submit their reports in hard copy to HUD Field Offices for review. The data are not entered into a database nor are they conveyed to HUD Headquarters. If the data were submitted electronically and aggregated, the results could be very useful for program planning and monitoring.¹⁴ The current report collects information on the number of residents served (though not the percent of residents served, which could be useful), age range of those residents, and the estimated level of frailty, defined as having 3 or more ADLs. This information in itself could provide a basic picture of the characteristics of elderly residents using the services. Service coordinators also report data on the number of residents who used specific services such as case management, conflict resolution, crisis intervention, health care, home care, personal care, meals, monitoring, transportation and substance use services. The report does not, however, capture specific information on program exits – i.e. whether seniors left to live with family, were hospitalized, or were placed in institutional settings.

A study of frail elderly clients at 11 PACE sites used routine clinical evaluations to create a multidimensional index that grouped elderly clients by varying levels of risk of mortality. Risk factors

¹⁴ Electronic reporting would also provide HUD with an easy way to identify HUD-assisted projects that have service coordinators. There is currently no way to do this easily.

included demographic characteristics, functional status and the presence of one or more chronic conditions (Carey, et al). While this was used to identify risk of mortality, perhaps it could be adapted to identify risk of nursing home placement or hospitalization.

Outcome Measures. The Department of Elder Affairs in Florida uses a series of outcome measures to determine if its Nursing Home Diversion Program is meeting state standards. The diversion program is designed to help frail seniors avoid nursing home admission by identifying community-based services to help seniors remain at home. Services may include case management, acute care, and long-term care to frail elders. Measures used by the State of Florida and which could be collected by service coordinators and used for elder residents of subsidized housing include percent of elders who were diverted from nursing homes, percent of elders who are at risk of nursing home placement but who were served with home or community based services, percent of service recipients whose ADL assessment score (estimated frailty) had been maintained or improved, and percent of service recipients who IADL assessment score has been maintained or improved.

For HUD to monitor progress toward aging in place for the elderly residents of subsidized housing, a baseline needs assessment should be conducted. Not only is it impossible to measure progress without some existing baseline, understanding the level of service needs will help to target resources efficiently. Communities and programs across the country are accomplishing this on a smaller scale. Outcome measures are also needed to evaluate progress. These measures should be pre-identified and used to determine improvement in the health and well-being of elderly residents, and in their ability to remain in their homes comfortably and safely.

Chapter 4: Recommendations for Further Research on Aging in Place in Assisted Housing

This report has presented findings on a relatively limited analysis of aging in place in HUD's assisted housing. HUD's longitudinal tenant data file yields useful information on the age at which elderly households leave assisted housing and reveals some patterns across housing program types, household characteristics, and neighborhood characteristics. Time and resources did not permit completion of some analyses we had hoped to do with the administrative data, however. Further, findings from the literature review suggest there are a number of areas for further research beyond what could be accomplished with HUD's administrative data. This section briefly summarizes the implications of our results for further research on aging in place in HUD-assisted housing.

Extending the EOP Analysis

Our analyses under this task order allowed us to look at age at EOP for elderly households and patterns across programs, household types, and neighborhood types. But we do not know the extent to which these factors interact to influence length of stay or age at exit.

Our proposed approach to the scope of work for the research had included revisiting the survival analysis presented in HUD's June 2008 report, *Section 202 Supportive Housing for the Elderly: Program Status and Performance Measurement*. To extend that analysis, we suggested replicating the survival analysis using the dataset prepared for this research and performing a multivariate regression analysis of age at EOP by including other program and household characteristics as covariates in the survival analysis. Such analysis would allow a rigorous assessment of whether program, household, and neighborhood characteristics are related to tenants' length of stay and age at program exit.

Given delays in obtaining the data and the time required to assemble and resolve issues with the data for this research, we did not have sufficient time or resources to complete this analysis, but we continue to think it would be useful to do at a later date.

One data issue we encountered may merit some follow-up by HUD. As noted in the methodology section, we found a high rate of "truncated" records in the TRACS data. This means the household had no EOP, but at some point disappeared from the data. We assumed these households left in our analysis, although this may not be true in all cases. It may be worthwhile for HUD to explore further why EOPs are missing for so many households in the TRACS data.

Monitoring and Measuring Aging in Place

HUD acknowledged in the scope of work for this research that EOP is one indicator for monitoring aging in place, but is not the only one nor is it necessarily the best barometer. A number of other potential measures of the success of strategies to promote aging in place were noted in Chapter 4. Some are measures of negative outcomes that were avoided, such as falls, emergency room visits, hospitalizations, and nursing home admissions. Others are positive outcomes that were enhanced, such as improved or maintained functioning, longer life expectancy, stronger social networks, and longer residency in independent housing.

While we now know more about age at EOP, we still do not know the reasons for elderly departures from assisted housing (death vs. moves to other settings) or where elderly households who do move elsewhere go when they leave. More research on these dimensions would help HUD, assisted housing managers,

service coordinators, and elderly households and their families promote and monitor aging in place more effectively.

The PIC and TRACS systems would be desirable vehicles for collecting this information because data would be reported on all households. However, this reporting would be an added burden on property managers as it presumably would have to apply to all households, not just the elderly. Another option would be to incorporate destination at exit in reporting for the HUD Service Coordinator program. This approach has limitations, too. It would not yield universal data because not all properties have service coordinators, and the results might not be indicative of outcomes for properties that do not have service coordinators.

HUD could institute monitoring of reason for EOP and destination at exit on a pilot basis to test the feasibility of implementation as well as to collect preliminary results. The pilot could then inform the design of more comprehensive reporting. Ideally, the pilot would include projects of varied program types, with and without service coordinators. This research might be a good opportunity to partner with one or more universities with students studying gerontology, social work, nursing, or related disciplines. University staff and students could help design and pilot reporting protocols and report back on implementation experience as well as the findings from the data collected. Alternatively, a PACE site or a similar community-based program might be able to help collect information on clients it serves who live in assisted housing.

Adapting Promising Program Models

A number of the program models mentioned in Chapter 4 either are already collaborating with assisted housing or have the potential to do so. Further research on how these models could best be adapted in assisted housing could benefit HUD's efforts to enhance aging in place.

It would also be interesting to explore further the apparent regional differences in average age at exit and retention of older residents. This could include looking at regional differences in life expectancy, as well as the presence of promising models for housing with supports, state policies on home and community-based care offered under Medicaid or other programs, and availability of affordable housing for low income seniors.

Bibliography

Andel Ross, Kathryn Hyer, April Slack (2007). "Risk Factors for Nursing Home Placement in Older Adults with and without Dementia." *Journal of Aging and Health* 19:213-228.

Andrews, Alice O., Stephen J. Bartels, Haiye Xie, and William J. Peacock (2009). "Increased Risk of Nursing Home Admission Among Middle Aged and Older Adults with Schizophrenia." *American Journal of Geriatric Psychiatry*, 17, 8, 697-705.

American Association of Homes and Services for the Aging and Enterprise Community Partners, Inc: *National Summit on Affordable Senior Housing and Services: Summit Proceedings*, May, 2010. Washington DC: AAHSA. Available at <u>http://www.aahsa.org/article_ifas.aspx?id=11827</u>

Carey, Elise C., Kenneth E. Covinsky, Li-Yung Lui, Catherine Eng, Laura P. Sands, and Louise C. Walter (2008). "Prediction of Mortality in Community-Living Frail Elderly People with Long-Term Care Needs." *JAGS*, 56, 1, 68-75.

Chen, Ya-Mei and Elaine Thompson (2010). "Understanding Factors that Influence Success of Home and Community Based Services in Keeping Older Adults in Community Settings." *Journal of Aging and Health*, 23, 3, 267-291.

Cohen, Rebecca (2010). *Connecting Existing Homes with Social Services*. AARP Public Policy Institute: Fact Sheet 171. Washington DC: AARP.

Cohen, Rebecca (2010). Connecting Residents of Subsidized Housing with Mainstream Supportive Services: Challenges and Recommendations. Washington DC: Center for Housing Policy.

Coffey, Gene (2008) *The Administration on Aging's Nursing Home Diversion Program*, May, 2008. Washington DC: National Senior Citizens Law Center.

Cotrell, Victoria and Paula C. Cardell (2010). "Health-Related Needs Assessment of Older Residents in Subsidized Housing." *Cityscape: A Journal of Policy Development and Research*, 12, 2: 47-66.

Federal Interagency Forum on Aging Related Statistics. *Older Americans 2010: Key Indicators of Well-Being*, July, 2010. Available at http://www.agingstats.gov/agingstatsdotnet/Main Site/Data/2010 Documents/Docs/OA 2010.pdf

Golant, Stephen M., Pamela Parsons, and Peter A. Boling (2010). "Assessing the Quality of Care Found in Affordable Clustered Housing-Care Arrangements: Key to Informing Public Policy." *Cityscape: A Journal of Policy Development and Research*, 12, 2: 5-28.

Institute for the Future of Aging Services, American Association of Homes and Services for the Aging. *Research on Affordable Senior Housing with Services Strategies*, May, 2010. Washington DC: AAHSA Available at http://www.aahsa.org/article_ifas.aspx?id=11827

Institute for the Future of Aging Services, American Association of Homes and Services for the Aging. *Affordable Senior Housing: The Case for Developing Effective Linkages with Health-Related and Supportive Services* May, 2010. Washington DC: AAHSA Available at http://www.aahsa.org/article_ifas.aspx?id=11827
Kasper, Judith, Liliana E. Pezzin, and J. Bradford Rice (2010). "Stability and Changes in Living Arrangements: Relationship to Nursing Home Admission and Timing of Placement." *Journal of Gerontology: Social Sciences*, 65B(6), 783-791.

Luppa, Melanei, Tobias Luck, Herbert Matschinger, Hans Helmut Konig, and Steffi Reidel Heller. 2010. "Predictors of Nursing Home Admissions of Individuals Without a Dementia Diagnosis Before Admission." *BMC Health Services Research*, 10 (186).

Moran, Mark (2010). "Nursing Home Placement and Mortality Rates for Those with Significant Cognitive Decline Found to Differ among Minorities and Whites." *Neurology Today* 10, 6, 1-24.

Perl, Libby (2009). Section 202 and Other HUD Rental Housing Programs for Low-Income Elderly Residents. Congressional Research Service Report for Congress: 7-5700. Available at http://aging.senate.gov/crs/aging13.pdf

Sanders, Alisha, Robyn Stone, Rhoda Meador, and Victoria Parker (2010). "Aging in Place Partnerships: A Training Program for Family Caregiver of Residents Living in Affordable Senior Housing." *Cityscape: A Journal of Policy Development and Research*, 12, 2: 85-104.

Sheehan, Nancy W. and Mariana T. Guzzardo (2008). "Resident Service Coordinators: Roles and Challenges in Senior Housing." *Journal of Housing for the Elderly*, 22, 3, 240-262.

State of Florida Department of Elder Affairs, "DOEA Performance/Outcome Measures and Standards", Available at http://elderaffairs.state.fl.us/english/pubs/pubs/PerfMeasures.pdf

Tang, Fengyan and Joseph G. Pickard (2008). "Aging in Place or Relocation: Perceived Awareness of Community-Based Long-Term Care and Services." *Journal of Housing for the Elderly*, 22, 4, 404-422.

U.S. Department of Health and Human Services, Administration on Aging. Nursing Home Diversion Modernization Grants Program. September, 2007. Available at www.aoa.gov/doingbus/fundopp/fundoppasp

U.S. Department of Housing and Urban Development (2008) *Multifamily Property Managers' Satisfaction with Service Coordination*. Available at http://elderaffairs.state.fl.us/english/pubs/pubs/PerfMeasures.pdf

U.S. Department of Housing and Urban Development. "Semi-Annual Performance Report: Multifamily Housing Service Coordinator Program" Accessed 1/14/11. Available at http://www.hud.gov/offices/adm/hudclips/forms/files/92456.pdf

Wardrip, Keith (2010). Strategies to Meet the Housing Needs of Older Adults. AARP Public Policy Institute: Insight on the Issues, 38. Washington DC: AARP.

Vladeck, Fredda, Rebecca Segel, Mia Oberlink, Michal D. Gursen, and Danyll Rudin (2010). "Health Indicators: A Proactive and Systematic Approach to Health Aging." *Cityscape: A Journal of Policy Development and Research*, 12, 2: 67-84.

Appendix A: Supplemental Data Tables

LIST OF TABLES

Appendix A-1 : Count of Households by HUD Program Type	32
Appendix A-2 : Age at EOP by HUD Region	33
Appendix A-3 : Age Ranges at EOP by HUD Region	34
Appendix A-4 : Age at EOP by Entry Cohort	37
Appendix A-5 : Age at EOP by Type of Project	39
Appendix A-6 : Age at EOP by Gender of Household Head	40
Appendix A-7 : Age at EOP by Race of Household Head	41
Appendix A-8 : Age at EOP by Disability Status of HH Head	43
Appendix A-9 : Age at EOP by HH Size	44
Appendix A-10 : Age at EOP by Neighborhood Poverty Level	45
Appendix A-11 : Age at EOP by Neighborhood Minority Status	47
Appendix A-12 : Age at EOP by Neighborhood Elderly Status	48
Appendix A-13 : Age at EOP by Neighborhood Female Headed HH Status	49
Appendix A-14 : Age at EOP by Neighborhood Renter Occupied Housing Status	50

11			Program Type									
							Program	m Type				
Reference Year	Al	1	All Se	c 202	All Se	ec 811	All O Assis Multif	sted	Public H	Iousing	Certifi	cates
	# of HH	Row %	# of HH	Row %	# of HH	Row %	# of HH	Row %	# of HH	Row %	# of HH	Row %
2000	130,609	100%	14,625	11%	100	0%	45,710	35%	44,749	34%	25,425	19%
2001	170,273	100%	22,130	13%	206	0%	69,563	41%	47,525	28%	30,849	18%
2002	198,640	100%	29,842	15%	354	0%	93,599	47%	39,982	20%	34,863	18%
2003	133,547	100%	20,241	15%	253	0%	51,306	38%	33,695	25%	28,052	21%
2004	142,794	100%	17,626	12%	301	0%	56,695	40%	38,341	27%	29,831	21%
2005	204,335	100%	34,731	17%	575	0%	91,590	45%	41,630	20%	35,809	18%
2006	163,744	100%	25,395	16%	494	0%	65,874	40%	46,533	28%	25,448	16%
2007	223,444	100%	31,792	14%	720	0%	81,484	36%	49,724	22%	59,724	27%
2008	68,779	100%	332	0%	3	0%	3,204	5%	35,080	51%	30,160	44%
Total Across Years	1,436,165	100%	196,714	14%	3,006	0%	559,025	39%	377,259	26%	300,161	21%

Appendix A-1 : Count of Households by HUD Program Type

	All All Sec 202 All Sec 811 Assisted											
HUD Region	Al	1	All Se	ec 202	All S	ec 811	Assi)ther isted family	Public Ho	ousing	Certifi	cates
	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
New England	90,476	6%	10,059	5%	121	4%	49,683	9%	12,875	3%	17,738	6%
New York/ New Jersey	158,857	11%	21,205	11%	190	6%	69,294	12%	26,449	7%	41,719	14%
Mid Atlantic	126,974	9%	19,298	10%	404	13%	61,704	11%	19,744	5%	25,824	9%
Southeast/ Caribbean	212,396	15%	43,791	22%	776	26%	81,365	15%	39,019	10%	47,445	16%
Midwest	237,807	17%	38,246	19%	577	19%	131,160	23%	32,294	9%	35,530	12%
Southwest	109,186	8%	23,746	12%	386	13%	34,608	6%	17,857	5%	32,589	11%
Great Plains	63,906	4%	11,519	6%	136	5%	30,213	5%	8,732	2%	13,306	4%
Rocky Mountain	36,054	3%	4,399	2%	78	3%	19,077	3%	2,878	1%	9,622	3%
Pacific	136,256	9%	18,308	9%	264	9%	52,403	9%	6,545	2%	58,736	20%
Northwest	38,599	3%	5,306	3%	49	2%	17,271	3%	3,596	1%	12,377	4%
Unknown	225,654	16%	837	0%	25	1%	12,247	2%	207,270	55%	5,275	2%
All Regions	1,436,165	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%	300,161	100%

Appendix A-2 : Age at EOP by HUD Region

Appendix	Appendix A-3 : Age Ranges at EOP by HUD Region All Program Type All All Other												
								Program	а Туре				
HUD R	egion	Al	I	All See	e 202	All Se	c 811	All Ot Assis Multifa	ted	Pub Hous		Certifi	cates
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	6,102	7%	309	3%	19	16%	2,799	6%	836	6%	2,139	12%
	65 to 69	10,918	12%	1,032	10%	28	23%	5,396	11%	1,630	13%	2,832	16%
	70 to 74	12,537	14%	1,361	14%	26	21%	6,473	13%	2,040	16%	2,637	15%
	75 to 79	15,121	17%	1,726	17%	22	18%	8,129	16%	2,399	19%	2,845	16%
New	80 to 84	17,583	19%	2,104	21%	14	12%	9,955	20%	2,576	20%	2,934	17%
England	85 to 89	15,959	18%	2,017	20%	5	4%	9,508	19%	1,946	15%	2,483	14%
	90 to 94	9,456	10%	1,171	12%	7	6%	5,756	12%	1,131	9%	1,391	8%
	Over 95	2,800	3%	339	3%			1,667	3%	317	2%	477	3%
	All	90,476	100%	10,059	100%	121	100%	49,683	100 %	12,875	100%	17,738	100 %
	Avg Age	79		880		73		80		78		77	
	62 to 64	11,375	7%	482	2%	58	31%	4,502	6%	2,279	9%	4,054	10%
	65 to 69	20,693	13%	1,902	9%	53	28%	8,660	12%	4,053	15%	6,025	14%
	70 to 74	23,845	15%	2,935	14%	27	14%	10,089	15%	4,581	17%	6,213	15%
	75 to 79	27,695	17%	4,061	19%	25	13%	11,837	17%	4,909	19%	6,863	16%
New York/ New	80 to 84	29,515	19%	4,641	22%	12	6%	12,912	19%	4,638	18%	7,312	18%
Jersey	85 to 89	25,926	16%	4,094	19%	13	7%	11,920	17%	3,583	14%	6,316	15%
	90 to 94	15,068	9%	2,351	11%	2	1%	7,143	10%	1,829	7%	3,743	9%
	Over 95	4,740	3%	739	3%			2,231	3%	577	2%	1,193	3%
	All	158,857	100%	21,205	100%	190	100%	69,294	100 %	26,449	100%	41,719	100 %
	Avg Age	78		80		70		79		77		78	
	62 to 64	10,092	8%	655	3%	102	25%	3,804	6%	1,947	10%	3,584	14%
	65 to 69	17,723	14%	1,990	10%	116	29%	7,304	12%	3,292	17%	5,021	19%
	70 to 74	19,629	15%	2,888	15%	59	15%	8,645	14%	3,601	18%	4,436	17%
	75 to 79	22,645	18%	3,627	19%	44	11%	10,877	18%	3,695	19%	4,402	17%
Mid	80 to 84	23,688	19%	4,175	22%	44	11%	12,302	20%	3,310	17%	3,857	15%
Atlantic	85 to 89	19,742	16%	3,517	18%	21	5%	11,073	18%	2,411	12%	2,720	11%
	90 to 94	10,565	8%	1,976	10%	13	3%	6,012	10%	1,172	6%	1,392	5%
	Over 95	2,890	2%	470	2%	5	1%	1,687	3%	316	2%	412	2%
	All	126,974	100%	19,298	100%	404	100%	61,704	100 %	19,744	100%	25,824	100 %
	Avg Age	78		80		71		79		76		75	

Appendix A-3 : Age R	anges at EOP by HUI	O Region (cont.)
11 8	8 8	8 ()

	8	t Kange				8	X	Program	Туре				
HUD R	egion	All		All Se	c 202	All Se	c 811	All O Assis Multifa	ted	Pub Hous		Certifi	cates
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	4,920	8%	521	5%	39	29%	1,988	7%	587	7%	1,785	13%
	65 to 69	8,384	13%	1,284	11%	29	21%	3,573	12%	1,071	12%	2,427	18%
	70 to 74	9,051	14%	1,661	14%	22	16%	4,099	14%	1,134	13%	2,135	16%
	75 to 79	10,667	17%	2,041	18%	18	13%	5,019	17%	1,534	18%	2,055	15%
Great	80 to 84	11,735	18%	2,300	20%	16	12%	5,710	19%	1,692	19%	2,017	15%
Plains	85 to 89	10,830	17%	2,136	19%	7	5%	5,480	18%	1,578	18%	1,629	12%
	90 to 94	6,316	10%	1,191	10%	5	4%	3,273	11%	885	10%	962	7%
	Over 95	2,003	3%	385	3%			1,071	4%	251	3%	296	2%
	All	63,906	100%	11,519	100%	136	100%	30,213	100 %	8,732	100 %	13,306	100 %
	Avg Age	79		80		71		79		79		76	
	62 to 64	3,133	9%	253	6%	22	28%	1,401	7%	184	6%	1,273	13%
	65 to 69	5,105	14%	606	14%	20	26%	2,446	13%	355	12%	1,678	17%
	70 to 74	5,308	15%	701	16%	13	17%	2,723	14%	402	14%	1,469	15%
	75 to 79	5,954	17%	815	19%	6	8%	3,041	16%	505	18%	1,587	16%
Rocky	80 to 84	6,356	18%	815	19%	10	13%	3,447	18%	563	20%	1,521	16%
Mountain	85 to 89	5,762	16%	665	15%	4	5%	3,366	18%	504	18%	1,223	13%
	90 to 94	3,407	9%	421	10%	2	3%	2,002	10%	291	10%	691	7%
	Over 95	1,029	3%	123	3%	1	1%	651	3%	74	3%	180	2%
	All	36,054	100%	4,399	100%	78	100%	19,077	100 %	2,878	100 %	9,622	100 %
	Avg Age	78		78		71		79		79		76	
	62 to 64	10,696	8%	567	3%	87	33%	3,131	6%	672	10%	6,239	11%
	65 to 69	19,921	15%	2,230	12%	70	27%	6,690	13%	1,153	18%	9,778	17%
	70 to 74	21,926	16%	2,994	16%	46	17%	8,203	16%	1,205	18%	9,478	16%
	75 to 79	25,372	19%	3,713	20%	17	6%	9,718	19%	1,268	19%	10,656	18%
Desif	80 to 84	24,977	18%	3,798	21%	18	7%	9,956	19%	1,037	16%	10,168	17%
Pacific	85 to 89	19,449	14%	2,931	16%	14	5%	8,361	16%	722	11%	7,421	13%
	90 to 94	10,629	8%	1,618	9%	11	4%	4,764	9%	381	6%	3,855	7%
	Over 95	3,286	2%	457	2%	1	0%	1,580	3%	107	2%	1,141	2%
	All	136,256	100%	18,308	100%	264	100%	52,403	100 %	6,545	100 %	58,736	100 %
	Avg Age	78		89		70		79		76		76	

Appendix	A-3 : Ag	ge Rang	ges at l	EOP by	HUD	Regio	n (con	nt.)					
								Program	n Type				
HUD R	egion	Al	11	All See	c 202	All Se	c 811	All O Assis Multifa	sted	Pub Hous		Certifi	cates
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	3,723	10%	229	4%	20	41%	1,350	8%	383	11%	1,741	14%
	65 to 69	6,431	17%	750	14%	14	29%	2,599	15%	644	18%	2,424	20%
	70 to 74	6,568	17%	892	17%	9	18%	2,838	16%	666	19%	2,163	17%
	75 to 79	6,874	18%	1,059	20%	2	4%	3,042	18%	656	18%	2,115	17%
	80 to 84	6,400	17%	1,002	19%	2	4%	2,977	17%	546	15%	1,873	15%
Northwest	85 to 89	4,944	13%	832	16%	2	4%	2,475	14%	422	12%	1,213	10%
	90 to 94	2,777	7%	416	8%			1,504	9%	218	6%	639	5%
	Over 95	882	2%	126	2%			486	3%	61	2%	209	2%
	All	38,599	100%	5,306	100%	49	100 %	17,271	100%	3,596	100%	12,377	100 %
	Avg Age	77		78		68		78		76		75	
	62 to 64	23,422	10%	49	6%	10	40%	1,410	12%	21,144	10%	809	15%
	65 to 69	37,110	16%	127	15%	2	8%	2,291	19%	33,645	16%	1,045	20%
	70 to 74	35,874	16%	138	16%	5	20%	2,217	18%	32,565	16%	949	18%
	75 to 79	37,614	17%	154	18%	1	4%	2,111	17%	34,509	17%	839	16%
Unknown	80 to 84	37,841	17%	150	18%	4	16%	1,896	15%	35,052	17%	739	14%
UIKIIOWII	85 to 89	30,443	13%	140	17%	2	8%	1,353	11%	28,432	14%	516	10%
	90 to 94	17,596	8%	66	8%		-	666	5%	16,574	8%	290	5%
	Over 95	5,754	3%	13	2%	1	4%	303	2%	5,349	3%	88	2%
	All	225,65 4	100%	837	100%	25	100 %	12,247	100%	207,270	100%	5,275	100 %
	Avg Age	77		78		72		76		77		75	
	62 to 64	122,89 7	9%	8,044	4%	774	26%	39,473	7%	36,740	10%	37,866	13%
	65 to 69	212,10 6	15%	23,746	12%	803	27%	73,387	13%	60,370	16%	53,800	18%
	70 to 74	224,92 8	16%	30,576	16%	506	17%	83,118	15%	61,451	16%	49,277	16%
	75 to 79	249,84 8	17%	37,015	19%	363	12%	96,434	17%	65,654	17%	50,382	17%
All Regions	80 to 84	255,99 9	18%	39,822	20%	284	9%	104,333	19%	64,017	17%	47,543	16%
J	85 to 89	212,92 5	15%		17%		6%	92,010				35,904	12%
	90 to 94	5 121,08 9	8%	33,489 18,661	9%	171 76	3%	53,938	16% 10%	51,351 28,818	14% 8%	19,596	7%
	Over 95	36,373	3%	5,361	3%	29	1%	16,332	3%	8,858	2%	5,793	2%
	All	1,436, 165	100%	196,714	100%	3,006	100 %	559,025	100%	377,259	100%	300,161	100 %

								Progra	ат Туре	1			
Entry Co	hort Year	A		All Se	ec 202		ec 811	All C Assi Multif	sted	Ho	ıblic using	Certif	icates
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	133	6%					2	6%	94	6%	37	8%
	65 to 69	218	11%					5	14%	150	10%	63	14%
	70 to 74	321	16%					5	14%	224	14%	92	20%
	75 to 79	385	19%	1	33%			10	29%	280	18%	94	20%
Unknown	80 to 84	381	19%	1	33%			5	14%	298	19%	77	17%
UIKIIOWII	85 to 89	380	18%					7	20%	312	20%	61	13%
	90 to 94	201	10%	1	33%			1	3%	165	11%	34	7%
	Over 95	40	2%	•						36	2%	4	1%
	All	2,059	100%	3	100%			35	100%	1,559	100%	462	100%
	Avg Age	79		83				77		79		77	
	62 to 64	5,796	7%	•		2	50%	1,431	5%	3,980	8%	383	6%
	65 to 69	9,925	12%	1	6%			2,388	8%	6,898	14%	638	10%
	70 to 74	10,615	13%	1	6%			2,540	9%	7,339	15%	735	12%
	75 to 79	11,751	14%	1	6%			3,041	11%	7,887	16%	822	13%
Prior to	80 to 84	13,147	16%	2	12%			4,163	15%	7,987	16%	995	16%
1980	85 to 89	15,258	18%	6	35%			6,452	23%	7,486	15%	1,314	21%
	90 to 94	12,583	15%	5	29%	2	50%	5,967	21%	5,581	11%	1,028	16%
	Over 95	5,226	6%	1	6%			2,387	8%	2,390	5%	448	7%
	All	84,301	100%	17	100%	4	100%	28,369	100%	49,548	100%	6,363	100%
	Avg Age	80		85		78		83		79		81	
	62 to 64	9,671	4%	234	1%			3,400	3%	2,895	5%	3,142	8%
	65 to 69	16,119	7%	462	2%	-		5,945	6%	4,999	8%	4,713	12%
	70 to 74	20,835	9%	939	5%			8,164	8%	6,508	11%	5,224	13%
	75 to 79	33,606	15%	2,555	13%	1	11%	14,468	14%	9,872	17%	6,710	16%
1980 to	80 to 84	49,954	22%	5,073	25%	3	33%	23,389	23%	13,343	22%	8,146	20%
1989	85 to 89	50,736	23%	5,663	28%	1	11%	25,390	25%	12,377	21%	7,305	18%
	90 to 94	31,666	14%	3,904	19%	1	11%	16,222	16%	7,248	12%	4,291	10%
	Over 95	10,024	5%	1,217	6%	3	33%	5,310	5%	2,131	4%	1,363	3%
	All	222,611	100%	20,047	100%	9	100%	102,288	100%	59,373	100%	40,894	100%
	Avg Age	82		85		88		83		81		79	

Appendix A-4 : Age at EOP by Entry Cohort

Appendi	x A-4 : A	ge at E	OP by	/ Enti	y Coh	ort							
								Progr	am Type				
Entry Co	hort Year	А	11	All S	ec 202	All S	ec 811	Ass	Other isted ifamily	Public	Housing	Cert	ificates
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	41,407	7%	2,121	3%	253	22%	13,912	6%	11,780	9%	13,341	11%
	65 to 69	76,793	13%	7,183	8%	304	26%	27,730	12%	21,578	16%	19,998	17%
	70 to 74	94,834	17%	12,963	15%	202	17%	37,933	16%	23,938	18%	19,798	17%
	75 to 79	109,763	19%	17,285	20%	174	15%	45,666	19%	25,639	19%	20,999	18%
1990 to	80 to 84	106,840	19%	18,464	22%	104	9%	45,899	20%	23,180	17%	19,193	16%
1999	85 to 89	83,905	15%	15,546	18%	76	7%	37,235	16%	17,187	13%	13,861	12%
	90 to 94	45,962	8%	8,663	10%	32	3%	20,822	9%	9,071	7%	7,374	6%
	Over 95	13,091	2%	2,549	3%	10	1%	5,836	2%	2,606	2%	2,090	2%
	All	572,595	100%	84,774	100%	1,155	100%	235,033	100%	134,979	100%	116,654	100%
	Avg Age	78		80		72		79		77		76	
	62 to 64	45,272	11%	3,965	5%	372	27%	15,733	10%	10,676	14%	14,526	16%
	65 to 69	77,743	19%	12,198	17%	375	28%	29,443	19%	16,191	21%	19,536	21%
	70 to 74	71,612	18%	13,192	18%	218	16%	28,124	18%	13,914	18%	16,164	17%
	75 to 79	69,560	17%	14,005	19%	148	11%	27,608	17%	12,970	17%	14,829	16%
2000 to	80 to 84	63,890	16%	13,509	18%	130	10%	25,881	16%	11,270	15%	13,100	14%
2004	85 to 89	46,747	12%	10,324	14%	71	5%	19,472	12%	7,863	10%	9,017	10%
	90 to 94	22,943	6%	5,216	7%	31	2%	9,471	6%	3,666	5%	4,559	5%
	Over 95	5,879	1%	1,371	2%	14	1%	2,442	2%	824	1%	1,228	1%
	All	403,646	100%	73,780	100%	1,359	100%	158,174	100%	77,374	100%	92,959	100%
	Avg Age	76		77		71		76		75		74	
	62 to 64	16,063	16%	1,724	10%	147	31%	4,880	14%	5,066	18%	4,246	19%
	65 to 69	23,903	23%	3,902	22%	124	26%	7,717	23%	6,659	24%	5,501	24%
	70 to 74	18,834	18%	3,481	19%	86	18%	6,186	18%	5,087	19%	3,994	18%
	75 to 79	16,143	16%	3,168	18%	40	8%	5,496	16%	4,072	15%	3,367	15%
2005 to	80 to 84	13,686	13%	2,773	15%	47	10%	4,857	14%	3,298	12%	2,711	12%
2008	85 to 89	9,401	9%	1,950	11%	23	5%	3,370	10%	2,206	8%	1,852	8%
	90 to 94	4,063	4%	872	5%	10	2%	1,421	4%	885	3%	875	4%
	Over 95	1,017	1%	223	1%	2	0%	347	1%	202	1%	243	1%
	All	103,110	100%	18,093	100%	479	100%	34,274	100%	27,475	100%	22,789	100%
	Avg Age	74		75		70		74		73		73	

Appendix A-4 : Age at EOP by Entry Cohort

Appendi	x A-4 : A	ge at E	JP by	Entry	Cono	ri							
								Progran	1 Туре				
Entry Col	hort Year	Al	1	All Sec	202	All Sec	811	Assist	All Other Assisted Multifamily		ic ng	Certific	cates
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	4,555	10%					115	13%	2,249	8%	2,191	11%
	65 to 69	7,405	15%					159	19%	3,895	14%	3,351	17%
	70 to 74	7,877	16%					166	19%	4,441	16%	3,270	16%
	75 to 79	8,640	18%					145	17%	4,934	18%	3,561	18%
Missing	80 to 84	8,101	17%	-				139	16%	4,641	17%	3,321	17%
wiissing	85 to 89	6,498	14%	-				84	10%	3,920	15%	2,494	12%
	90 to 94	3,671	8%					34	4%	2,202	8%	1,435	7%
	Over 95	1,096	2%	-				10	1%	669	2%	417	2%
	All	47,843	100%	-				852	100%	26,951	100%	20,040	100%
	Avg Age	77		-				75		78		76	
	62 to 64	122,897	9%	8,044	4%	774	26%	39,473	7%	36,740	10%	37,866	13%
	65 to 69	212,106	15%	23,746	12%	803	27%	73,387	13%	60,370	16%	53,800	18%
	70 to 74	224,928	16%	30,576	16%	506	17%	83,118	15%	61,451	16%	49,277	16%
	75 to 79	249,848	17%	37,015	19%	363	12%	96,434	17%	65,654	17%	50,382	17%
All Cohort Years	80 to 84	255,999	18%	39,822	20%	284	9%	104,333	19%	64,017	17%	47,543	16%
I curs	85 to 89	212,925	15%	33,489	17%	171	6%	92,010	16%	51,351	14%	35,904	12%
	90 to 94	121,089	8%	18,661	9%	76	3%	53,938	10%	28,818	8%	19,596	7%
	Over 95	36,373	3%	5,361	3%	29	1%	16,332	3%	8,858	2%	5,793	2%
	All	1,436,165	100%	196,714	100%		100%		100%	377,259	100%	300,161	100%

Appendix A-4 : Age at EOP by Entry Cohort

Appendix A-5 : Age at EOP by Type of Project

						Progra	am Type				
Project Type	All		All Sec 2	202	All Sec	811	All Oth Assiste Multifan	ed	Public Ho	using	
	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	
Primarily Non- Elderly Occupancy	664,408	58%			2,670	89%	366,810	66%	294,928	78%	
Avg Age	77		•		71		78		76		
Primarily Elderly Occupancy	471,596	42%	196,714	100%	336	11%	192,215	34%	82,331	22%	
Avg Age	80		79		78		80		80		
All	1,136,004	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%	
particular project, defin project was calculated f projects with 60% or m multifamily housing, a	bancy was defined according to the percentage of heads of household age 62 or over living in a ed by the project code variable in the database. The percentage of elderly households living in a for each project code in the database by the reference year and program type. For public housing, bore elderly heads of household were flagged as Primarily Elderly Occupancy. For other assisted broject was flagged as Primarily Elderly if 80% or more of the heads of household were elderly. All re flagged as Primarily Elderly.										

							Progran	1 Туре			
HH Head	Gender	A		All Sec		All Se		All O Assis Multifa	ted amily	Public F	_
	1	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	35,211	10%	3,423	7%	350	29%	15,772	10%	15,666	12%
	65 to 69	63,394	19%	9,046	17%	335	28%	28,502	18%	25,511	20%
	70 to 74	64,779	19%	10,539	20%	219	18%	29,397	19%	24,624	19%
	75 to 79	62,710	19%	10,525	20%	147	12%	28,963	19%	23,075	18%
Male HH	80 to 84	53,040	16%	9,219	18%	95	8%	24,866	16%	18,860	15%
Head	85 to 89	35,055	10%	6,139	12%	48	4%	17,069	11%	11,799	9%
	90 to 94	16,713	5%	2,848	5%	17	1%	8,409	5%	5,439	4%
	Over 95	4,515	1%	794	2%	3	0%	2,263	1%	1,455	1%
	All	335,417	100%	52,533	100%	1,214	100%	155,241	100%	126,429	100%
	Avg Age	75		76		70		76		75	
	62 to 64	49,805	6%	4,618	3%	424	24%	23,691	6%	21,072	8%
	65 to 69	94,891	12%	14,695	10%	467	26%	44,871	11%	34,858	14%
	70 to 74	110,851	14%	20,028	14%	287	16%	53,711	13%	36,825	15%
	75 to 79	136,725	17%	26,482	18%	216	12%	67,449	17%	42,578	17%
Female HH	80 to 84	155,375	19%	30,586	21%	189	11%	79,445	20%	45,155	18%
Head	85 to 89	141,941	18%	27,343	19%	123	7%	74,924	19%	39,551	16%
	90 to 94	84,770	11%	15,809	11%	59	3%	45,523	11%	23,379	9%
	Over 95	26,062	3%	4,567	3%	26	1%	14,066	3%	7,403	3%
	All	800,420	100%	144,128	100%	1,791	100%	403,680	100%	250,821	100%
	Avg Age	79		80		72		80		78	
	62 to 64	15	9%	3	6%			10	10%	2	22%
	65 to 69	21	13%	5	9%	1	100%	14	13%	1	11%
	70 to 74	21	13%	9	17%			10	10%	2	22%
	75 to 79	31	19%	8	15%			22	21%	1	11%
Unknown	80 to 84	41	25%	17	32%			22	21%	2	22%
CIRRIOWI	85 to 89	25	15%	7	13%				16%	1	11%
	90 to 94	10	6%	4	8%			6	6%		
	Over 95	3	2%					3	3%		
	All	167	100%	53	100%	1	100%	104	100%	9	100%
	Avg Age	78		78		69		78		74	
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%
All	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%
	All	1,136,004	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%

Appendix A-6 : Age at EOP by Gender of Household Head

							Progra	ат Туре			
НН Не	ad Race	All	l	All Sec 202		All Sec 811		All Other Assisted Multifamily		Public Housing	
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	31,512	5%	4,967	4%	571	29%	21,081	5%	4,893	6%
	65 to 69	65,753	11%	14,291	11%	562	28%	41,912	11%	8,988	12%
	70 to 74	81,950	14%	18,729	14%	308	16%	51,740	13%	11,173	15%
	75 to 79	103,778	17%	24,426	18%	222	11%	65,183	17%	13,947	18%
Non-Hisp,	80 to 84	119,443	20%	28,135	21%	158	8%	76,410	20%	14,740	19%
White	85 to 89	110,113	18%	25,155	19%	96	5%	71,555	19%	13,307	17%
	90 to 94	64,901	11%	14,415	11%	41	2%	43,066	11%	7,379	10%
	Over 95	18,822	3%	4,018	3%	15	1%	12,746	3%	2,043	3%
	All	596,272	100%	134,136	100%	1,973	100%	383,693	100%	76,470	100%
	Avg Age	79		80		70		80		79	
	62 to 64	17,853	10%	2,055	6%	149	21%	11,237	11%	4,412	11%
	65 to 69	32,590	18%	5,880	16%	179	25%	19,116	19%	7,415	19%
	70 to 74	33,320	19%	7,014	19%	132	18%	18,593	18%	7,581	19%
	75 to 79	32,705	18%	7,264	20%	93	13%	18,012	18%	7,336	19%
Non-Hisp,	80 to 84	28,410	16%	6,592	18%	83	12%	15,855	15%	5,880	15%
Black	85 to 89	19,929	11%	4,592	13%	44	6%	11,273	11%	4,020	10%
	90 to 94	10,767	6%	2,399	7%	25	4%	6,113	6%	2,230	6%
	Over 95	3,704	2%	822	2%	9	1%	2,120	2%	753	2%
	All	179,278	100%	36,618	100%	714	100%	102,319	100%	39,627	100%
	Avg Age	76		77		73		76		76	
	62 to 64	6,334	9%	718	4%	37	17%	4,102	10%	1,477	11%
	65 to 69	12,339	17%	2,577	14%	30	14%	7,299	19%	2,433	18%
	70 to 74	13,105	18%	3,402	19%	40	19%	7,149	18%	2,514	18%
	75 to 79	13,379	19%	3,723	21%	41	19%	7,066	18%	2,549	19%
Hispanic	80 to 84	11,658	16%	3,438	19%	29	13%	6,129	16%	2,062	15%
mspanie	85 to 89	8,517	12%	2,441	14%	25	12%	4,491	11%	1,560	11%
	90 to 94	4,291	6%	1,171	7%	9	4%	2,269	6%	842	6%
	Over 95	1,254	2%	330	2%	5	2%	702	2%	217	2%
	All	70,877	100%	17,800	100%	216	100%	39,207	100%	13,654	100%
	Avg Age	76		77		73		76		76	

Appendix A-7 : Age at EOP by Race of Household Head

							Progr	am Type			
НН Не	ad Race	A	11	All Se	ec 202	All S	Sec 811	All C Assi Multif	sted	Public I	Housing
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	1,748	6%	163	3%	10	19%	1,309	6%	266	11%
	65 to 69	3,823	13%	684	12%	17	32%	2,660	13%	462	19%
	70 to 74	5,046	18%	1,059	18%	15	28%	3,553	17%	419	18%
	75 to 79	5,641	20%	1,202	21%	3	6%	3,994	19%	442	19%
Other	80 to 84	5,493	19%	1,209	21%	4	8%	3,933	19%	347	15%
Other	85 to 89	4,209	15%	931	16%	3	6%	3,002	15%	273	11%
	90 to 94	2,189	8%	468	8%	1	2%	1,584	8%	136	6%
	Over 95	646	2%	128	2%			476	2%	42	2%
	All	28,795	100%	5,844	100%	53	100%	20,511	100%	2,387	100%
	Avg Age	78		79		71		78		76	
	62 to 64	27,584	11%	141	6%	7	14%	1,744	13%	25,692	10%
	65 to 69	43,801	17%	314	14%	15	30%	2,400	18%	41,072	17%
	70 to 74	42,230	16%	372	16%	11	22%	2,083	16%	39,764	16%
	75 to 79	43,963	17%	400	17%	4	8%	2,179	16%	41,380	17%
Unknown	80 to 84	43,452	17%	448	19%	10	20%	2,006	15%	40,988	17%
UIKIUWII	85 to 89	34,253	13%	370	16%	3	6%	1,689	13%	32,191	13%
	90 to 94	19,345	7%	208	9%			906	7%	18,231	7%
	Over 95	6,154	2%	63	3%			288	2%	5,803	2%
	All	260,782	100%	2,316	100%	50	100%	13,295	100%	245,121	100%
	Avg Age	76		78		72		76		77	
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%
All	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%
	All	1,136,00 4	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%

Appendix A-7 : Age at EOP by Race of Household Head (cont.)

Appendi	ppendix A-8 : Age at EOP by Disability Status of Household Head												
				HH Disability Status									
Age at	EOP	Al	1	All Se	ec 202	All Se	ec 811	Assi	Other isted family	Public Housing			
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %		
	62 to 64	31,714	22%	976	85%	251	96%	7,180	58%	23,307	18%		
	65 to 69	31,994	22%	67	6%	7	3%	1,805	15%	30,115	23%		
	70 to 74	24,618	17%	38	3%	2	1%	1,230	10%	23,348	18%		
	75 to 79	20,904	14%	18	2%	2	1%	896	7%	19,988	15%		
HH Head w/	80 to 84	16,762	12%	27	2%			694	6%	16,041	12%		
w/ disability	85 to 89	11,474	8%	12	1%			358	3%	11,104	8%		
	90 to 94	6,002	4%	13	1%			179	1%	5,810	4%		
	Over 95	1,975	1%	2	0%	•		53	0%	1,920	1%		
	All	145,443	100%	1,153	100%	262	100%	12,395	100%	131,633	100%		
	Avg Age	73		64		63		67		74			
	62 to 64	53,299	5%	7,068	4%	523	19%	32,293	6%	13,415	5%		
	65 to 69	126,263	13%	23,679	12%	796	29%	71,582	13%	30,206	12%		
	70 to 74	150,950	15%	30,538	16%	504	18%	81,885	15%	38,023	16%		
	75 to 79	178,444	18%	36,997	19%	361	13%	95,538	17%	45,548	19%		
HH Head w/o	80 to 84	191,549	19%	39,795	20%	284	10%	103,637	19%	47,833	20%		
disability	85 to 89	165,418	17%	33,477	17%	171	6%	91,652	17%	40,118	16%		
-	90 to 94	95,419	10%	18,648	10%	76	3%	53,759	10%	22,936	9%		
	Over 95	28,581	3%	5,359	3%	29	1%	16,279	3%	6,914	3%		
	All	989,923	100%	195,561	100%	2,744	100%	546,625	100%	244,993	100%		
	Avg Age	79		79		72		79		79			
	62 to 64	18	3%							18	3%		
	65 to 69	49	8%			•				49	8%		
	70 to 74	83	13%			•		3	60%	80	13%		
	75 to 79	118	18%			•		•		118	19%		
Unknown	80 to 84	145	23%			•		2	40%	143	23%		
	85 to 89	129	20%			•		-		129	20%		
	90 to 94	72	11%			•		-		72	11%		
	Over 95	24	4%							24	4%		
	All	638	100%					5	100%	633	100%		
	Avg Age	80						75		81			
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%		
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%		
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%		
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%		
All	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%		
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%		
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%		
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%		
	All	1,136,004	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%		

Annandiy A & Aga at FOD by Disability Status of Household Hoad

••			v	Household Size Program Type									
нн	Size	All		All Sec	202	All Sec		All Oth Assiste Multifai	ed	Public Housing			
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %		
	62 to 64	67,192	7%	7,514	4%	731	26%	31,550	6%	27,397	9%		
	65 to 69	130,249	13%	22,043	12%	744	27%	61,150	12%	46,312	15%		
	70 to 74	149,312	15%	28,384	15%	465	17%	71,213	14%	49,250	16%		
	75 to 79	174,178	18%	34,502	19%	330	12%	84,783	17%	54,563	17%		
HH Size =	80 to 84	186,774	19%	37,462	20%	258	9%	93,957	19%	55,097	18%		
1	85 to 89	162,311	16%	31,687	17%	157	6%	84,827	17%	45,640	15%		
	90 to 94	94,581	10%	17,879	10%	72	3%	50,470	10%	26,160	8%		
	Over 95	28,859	3%	5,178	3%	28	1%	15,493	3%	8,160	3%		
	All	993,456	100%	184,649	100%	2,785	100%	493,443	100%	312,579	100%		
	Avg Age	78		79		71		79		78			
	62 to 64	17,578	13%	530	4%	43	19%	7,900	12%	9,105	15%		
	65 to 69	27,610	20%	1,703	14%	59	27%	12,228	19%	13,620	22%		
	70 to 74	25,896	19%	2,192	18%	41	19%	11,895	18%	11,768	19%		
HH Size > 1	75 to 79	24,801	18%	2,513	21%	33	15%	11,643	18%	10,612	17%		
	80 to 84	21,236	15%	2,360	20%	26	12%	10,365	16%	8,485	14%		
	85 to 89	14,338	10%	1,802	15%	14	6%	7,171	11%	5,351	9%		
	90 to 94	6,721	5%	782	6%	4	2%	3,468	5%	2,467	4%		
	Over 95	1,659	1%	183	2%	1	0%	839	1%	636	1%		
	All	139,839	100%	12,065	100%	221	100%	65,509	100%	62,044	100%		
	Avg Age	74		78		72		75		74			
	62 to 64	261	10%					23	32%	238	9%		
	65 to 69	447	17%					9	12%	438	17%		
	70 to 74	443	16%					10	14%	433	16%		
	75 to 79	487	18%			-		8	11%	479	18%		
Unknown	80 to 84	446	16%					11	15%	435	17%		
UIKIIUWII	85 to 89	372	14%					12	16%	360	14%		
	90 to 94	191	7%							191	7%		
	Over 95	62	2%		•					62	2%		
	All	2,709	100%					73	100%	2,636	100%		
	Avg Age	76						73		77			
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%		
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%		
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%		
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%		
All	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%		
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%		
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%		
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%		
	All	1,136,004	100%		100%	3,006	100%	559,025	100%	377,259	100%		

Appendix A-9 : Age at EOP by Household Size

							Progr	am Type			
Povert	y Level	А	.11	All Se	ec 202	All S	ec 811		er Assisted ifamily	Public I	Housing
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	9,446	4%	1,685	3%	221	30%	6,287	4%	1,253	5%
	65 to 69	21,895	10%	5,476	9%	203	28%	13,754	10%	2,462	11%
	70 to 74	29,286	13%	7,863	13%	106	14%	18,093	13%	3,224	14%
	75 to 79	39,300	17%	10,929	18%	80	11%	24,050	17%	4,241	18%
Low	80 to 84	47,625	21%	13,362	22%	65	9%	29,336	21%	4,862	21%
Poverty	85 to 89	44,456	20%	12,201	20%	41	6%	28,000	20%	4,214	18%
	90 to 94	26,753	12%	6,957	12%	13	2%	17,477	12%	2,306	10%
	Over 95	7,799	3%	1,994	3%	5	1%	5,175	4%	625	3%
	All	226,560	100%	60,467	100%	734	100%	142,172	100%	23,187	100%
	Avg Age	79		81		71		80		79	
	62 to 64	39,231	7%	4,942	4%	426	26%	24,453	7%	9,410	9%
	65 to 69	75,891	14%	14,259	13%	465	28%	44,829	14%	16,338	16%
	70 to 74	86,080	16%	18,032	16%	286	17%	50,014	15%	17,748	17%
	75 to 79	97,657	18%	20,986	19%	195	12%	57,081	17%	19,395	19%
Medium	80 to 84	100,012	18%	21,589	20%	147	9%	60,337	18%	17,939	17%
Poverty	85 to 89	84,289	15%	17,574	16%	76	5%	52,537	16%	14,102	13%
	90 to 94	47,765	9%	9,863	9%	42	3%	30,244	9%	7,616	7%
	Over 95	14,105	3%	2,835	3%	15	1%	9,087	3%	2,168	2%
	All	545,030	100%	110,080	100%	1,652	100%	328,582	100%	104,716	100%
	Avg Age	77		79		71		78		77	
	62 to 64	9,173	10%	736	6%	51	16%	4,919	10%	3,467	12%
	65 to 69	16,011	18%	1,948	15%	54	17%	8,339	18%	5,670	20%
	70 to 74	16,082	18%	2,324	18%	60	19%	8,151	17%	5,547	19%
	75 to 79	15,849	18%	2,555	20%	48	15%	8,084	17%	5,162	18%
High	80 to 84	13,950	16%	2,360	18%	49	16%	7,563	16%	3,978	14%
Poverty	85 to 89	10,449	12%	1,753	14%	33	11%	5,750	12%	2,913	10%
	90 to 94	5,620	6%	891	7%	14	4%	3,196	7%	1,519	5%
	Over 95	1,856	2%	292	2%	5	2%	1,078	2%	481	2%
	All	88,990	100%	12,859	100%	314	100%	47,080	100%	28,737	100%
	Avg Age	76		78		75		76		75	

Appendix A-10 : Age at EOP by Neighborhood Poverty Level

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							Progra	ат Туре			
Povert	y Level	А	All		All Sec 202		All Sec 811		ther ted amily	Public Housing	
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	27,181	10%	681	5%	76	25%	3,814	9%	22,610	10%
	65 to 69	44,509	16%	2,063	16%	81	26%	6,465	16%	35,900	16%
	70 to 74	44,203	16%	2,357	18%	54	18%	6,860	17%	34,932	16%
	75 to 79	46,660	17%	2,545	19%	40	13%	7,219	18%	36,856	17%
T	80 to 84	46,869	17%	2,511	19%	23	8%	7,097	17%	37,238	17%
Unknown	85 to 89	37,827	14%	1,961	15%	21	7%	5,723	14%	30,122	14%
	90 to 94	21,355	8%	950	7%	7	2%	3,021	7%	17,377	8%
	Over 95	6,820	2%	240	2%	4	1%	992	2%	5,584	3%
	All	275,424	100%	13,308	100%	306	100%	41,191	100%	220,619	100%
	Avg Age	77		78		72		77		77	
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%
All	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%
	All	1,136,004	100%		100%	3,006	100%	559,025	100%	377,259	100%

Appendix A-10 : Age at EOP by Neighborhood Poverty Level (cont.)

				Program Type									
Minority	y Status	All		All Sec	202	All Sec	811	All Other Assisted Multifamily		Public Housing			
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %		
	62 to 64	32,662	6%	4,726	4%	509	29%	20,754	6%	6,673	8%		
	65 to 69	66,312	12%	13,568	11%	492	28%	40,351	12%	11,901	13%		
	70 to 74	80,043	14%	17,847	14%	270	15%	48,186	14%	13,740	16%		
	75 to 79	98,856	17%	22,876	18%	200	11%	59,478	17%	16,302	18%		
Racial Minorities	80 to 84	111,286	20%	26,113	21%	148	8%	68,551	20%	16,474	19%		
<= 50%	85 to 89	100,302	18%	23,183	19%	90	5%	63,172	18%	13,857	16%		
	90 to 94	58,752	10%	13,181	11%	37	2%	37,978	11%	7,556	9%		
	Over 95	16,826	3%	3,707	3%	13	1%	11,071	3%	2,035	2%		
	All	565,039	100%	125,201	100%	1,759	100%	349,541	100%	88,538	100%		
	Avg Age	79		80		71		79		78			
	62 to 64	25,188	9%	2,637	5%	189	20%	14,905	9%	7,457	11%		
	65 to 69	47,485	16%	8,115	14%	230	24%	26,571	16%	12,569	18%		
	70 to 74	51,405	17%	10,372	18%	182	19%	28,072	17%	12,779	19%		
	75 to 79	53,950	18%	11,594	20%	123	13%	29,737	18%	12,496	18%		
Racial	80 to 84	50,301	17%	11,198	19%	113	12%	28,685	17%	10,305	15%		
Minorities > 50%	85 to 89	38,892	13%	8,345	14%	60	6%	23,115	14%	7,372	11%		
	90 to 94	21,386	7%	4,530	8%	32	3%	12,939	8%	3,885	6%		
	Over 95	6,934	2%	1,414	2%	12	1%	4,269	3%	1,239	2%		
	All	295,541	100%	58,205	100%	941	100%	168,293	100%	68,102	100%		
	Avg Age	77		78		73		77		76			
	62 to 64	27,181	10%	681	5%	76	25%	3,814	9%	22,610	10%		
	65 to 69	44,509	16%	2,063	16%	81	26%	6,465	16%	35,900	16%		
	70 to 74	44,203	16%	2,357	18%	54	18%	6,860	17%	34,932	16%		
	75 to 79	46,660	17%	2,545	19%	40	13%	7,219	18%	36,856	17%		
	80 to 84	46,869	17%	2,511	19%	23	8%	7,097	17%	37,238	17%		
Unknown	85 to 89	37,827	14%	1,961	15%	21	7%	5,723	14%	30,122	14%		
	90 to 94	21,355	8%	950	7%	7	2%	3,021	7%	17,377	8%		
	Over 95	6,820	2%	240	2%	4	1%	992	2%	5,584	3%		
	All	275,424	100%	13,308	100%	306	100%	41,191	100%	220,619	100%		
	Avg Age	77		78		72		77		77			
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%		
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%		
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%		
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%		
	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%		
-	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%		
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%		
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%		
-	All	1,136,004	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%		
	aken from Ce			,	100%	3,006	100%	339,025	100%	511,239	100%		

Appendix A-11 : Age at EOP by Neighborhood Minority Status

Elderly					Program Type										
Elderly Status		All		All Sec 202		All Sec 811		All Other Assisted Multifamily		Public Housing					
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %				
	62 to 64	57,123	7%	7,297	4%	692	26%	35,088	7%	14,046	9%				
	65 to 69	112,152	13%	21,472	12%	719	27%	65,647	13%	24,314	16%				
-	70 to 74	129,325	15%	27,940	15%	449	17%	74,604	15%	26,332	17%				
	75 to 79	150,108	18%	34,090	19%	323	12%	87,123	17%	28,572	18%				
% HH w/ head 65+	80 to 84	158,448	19%	36,887	20%	257	10%	94,745	19%	26,559	17%				
<=50%	85 to 89	136,325	16%	31,209	17%	150	6%	83,910	17%	21,056	14%				
-	90 to 94	78,471	9%	17,505	10%	68	3%	49,544	10%	11,354	7%				
	Over 95	23,205	3%	5,065	3%	24	1%	14,878	3%	3,238	2%				
-	All	845,157	100%	181,465	100%	2,682	100%	505,539	100%	155,471	100%				
	Avg Age	78		79		71		79		77					
-	62 to 64	727	5%	66	3%	6	33%	571	5%	84	7%				
-	65 to 69	1,645	11%	211	11%	3	17%	1,275	10%	156	13%				
-	70 to 74	2,122	14%	279	14%	3	17%	1,653	13%	187	16%				
% HH w/	75 to 79	2,696	17%	380	20%			2,090	17%	226	19%				
neau 05+ -	80 to 84	3,138	20%	424	22%	4	22%	2,490	20%	220	19%				
	85 to 89	2,869	19%	319	16%			2,377	19%	173	15%				
	90 to 94	1,667	11%	206	11%	1	6%	1,373	11%	87	7%				
	Over 95 All	555 15,419	4% 100%	56 1,941	3% 100%	1 18	6% 100%	462 12,291	4% 100%	36 1,169	3% 100%				
	Avg Age	80	10070	80	10070	72	10070	80	10070	78	10070				
	62 to 64	27,181	10%	681	5%	76	25%	3,814	9%	22,610	10%				
	65 to 69	44,509	16%	2,063	16%	81	26%	6,465	16%	35,900	16%				
	70 to 74	44,204	16%	2,357	18%	54	18%	6,861	17%	34,932	16%				
	75 to 79	46,662	17%	2,545	19%	40	13%	7,221	18%	36,856	17%				
Unknown	80 to 84	46,870	17%	2,511	19%	23	8%	7,098	17%	37,238	17%				
UIKIOWI	85 to 89	37,827	14%	1,961	15%	21	7%	5,723	14%	30,122	14%				
-	90 to 94	21,355	8%	950	7%	7	2%	3,021	7%	17,377	8%				
	Over 95	6,820	2%	240	2%	4	1%	992	2%	5,584	3%				
-	All	275,428	100%	13,308	100%	306	100%	41,195	100%	220,619	100%				
	Avg Age	77		78		72		77		77					
-	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%				
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%				
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%				
-	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%				
	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%				
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%				
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%				
-	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%				
	All	1,136,004	100%	196,714	100%	3,006	100%	559,025	100%	377,259	100%				

Appendix A-12 : Age at	EOP by Neighborhood	I Elderly Population

	<u>x A-13 : A</u>	8		8				т Туре			
Female Hea Chilo		All		All Sec 202		All Sec 811		All Other Assisted Multifamily		Public Housing	
		# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %	# of HH	Col %
	62 to 64	41,288	6%	5,929	4%	604	27%	25,908	6%	8,847	8%
	65 to 69	84,262	12%	17,586	11%	615	28%	50,358	12%	15,703	14%
	70 to 74	100,841	15%	23,097	15%	363	16%	59,547	14%	17,834	16%
% female	75 to 79	121,768	18%	28,887	19%	264	12%	72,057	17%	20,560	19%
	80 to 84	133,030	19%	31,891	21%	193	9%	80,749	19%	20,197	18%
w/ children <=50%	85 to 89	117,166	17%	27,454	18%	114	5%	73,110	17%	16,488	15%
<-50 <i>7</i> 0	90 to 94	67,956	10%	15,501	10%	51	2%	43,431	10%	8,973	8%
	Over 95	19,697	3%	4,402	3%	19	1%	12,820	3%	2,456	2%
	All	686,008	100%	154,747	100%	2,223	100%	417,980	100%	111,058	100%
	Avg Age	78		79		71		79		78	
	62 to 64	16,350	9%	1,431	5%	89	19%	9,594	10%	5,236	12%
	65 to 69	29,156	17%	4,077	14%	107	23%	16,254	17%	8,718	19%
	70 to 74	30,238	18%	5,099	18%	89	19%	16,417	17%	8,633	19%
% female	75 to 79	30,636	18%	5,543	19%	59	13%	16,843	17%	8,191	18%
headed HH w/ children > 50%	80 to 84	28,201	16%	5,384	19%	68	14%	16,203	17%	6,546	14%
	85 to 89	21,745	13%	4,051	14%	36	8%	12,953	13%	4,705	10%
	90 to 94	12,015	7%	2,190	8%	18	4%	7,355	7%	2,452	5%
	Over 95	4,025	2%	711	2%	6	1%	2,491	3%	817	2%
	All	172,366	100%	28,486	100%	472	100%	98,110	100%	45,298	100%
	Avg Age	76		78		73		77		75	
	62 to 64	27,393	10%	684	5%	81	26%	3,971	9%	22,657	10%
	65 to 69	44,888	16%	2,083	15%	81	26%	6,775	16%	35,949	16%
	70 to 74	44,572	16%	2,380	18%	54	17%	7,154	17%	34,984	16%
	75 to 79	47,062	17%	2,585	19%	40	13%	7,534	18%	36,903	17%
Unknown	80 to 84	47,225	17%	2,547	19%	23	7%	7,381	17%	37,274	17%
0	85 to 89	38,110	14%	1,984	15%	21	7%	5,947	14%	30,158	14%
	90 to 94	21,522	8%	970	7%	7	2%	3,152	7%	17,393	8%
	Over 95	6,858	2%	248	2%	4	1%	1,021	2%	5,585	3%
	All	277,630	100%	13,481	100%	311	100%	42,935	100%	220,903	100%
	Avg Age	77		78		72		77		77	
	62 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%
	65 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%
	70 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%
	75 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%
All	80 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%
	85 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%
	90 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%
	Over 95	30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%
	All	1,136,004	100%	196,714	100%	3,006	100%	559,025	100%	377,259	
Census data t	taken from Co					, *					

Appendix A-14 : Age at EOP by Neighborhood Renter Occupied Housi	ng Status
inprendit i i i i i i i i i ge de Loi of i eignoornood i eenter o eeupred i iousi	

% renter occupied housing units <=50% 90 0 41 A1 Ax 62 65 70 % renter occupied housing 80 75 80 75 80 75 80 75 80 75 80 75 80 85 90 75 80 85 90 75 80 85 90 75 75 90 75 75 90 75 75 75 75 75 75 75 75 75 75 75 75 75	2 to 64 5 to 69 70 to 74 75 to 79 70 to 84 75 to 89 70 to 94 70 to 95	# of HH 26,394 52,832 62,066 75,364 83,217 72,000	Col % 6% 12% 14% 18%	All Sec # of HH 4,480 12,840 16,366	c 202 Col % 4% 12%	All Sec # of HH 488	e 811 Col %	All Other Multifa # of HH		Public H # of HH	lousing Col %
% renter occupied housing units <=50% 62 65 70 90 0v A1 Av 62 65 70 90 0v A1 Av 62 65 70 90 0v A1 80 90 0v A1 80 90 0v A1 80 85 90 90 90 90 90 90 90 90 90 90 90 90 90	5 to 69 0 to 74 5 to 79 0 to 84 5 to 89 0 to 94 Over 95	26,394 52,832 62,066 75,364 83,217	6% 12% 14%	4,480 12,840	4%		Col %	# of HH	Col %	# of HH	Col %
% renter occupied housing units <=50% 62 65 70 90 0v A1 Av 62 65 70 90 0v A1 Av 62 65 70 90 0v A1 80 90 0v A1 80 90 0v A1 80 85 90 90 90 90 90 90 90 90 90 90 90 90 90	5 to 69 0 to 74 5 to 79 0 to 84 5 to 89 0 to 94 Over 95	52,832 62,066 75,364 83,217	12% 14%	12,840		100				f	
% renter occupied housing units <=50% 0v A1 Av 62 65 70 % renter occupied housing 95	0 to 74 5 to 79 0 to 84 5 to 89 0 to 94 Over 95	62,066 75,364 83,217	14%		12%	400	26%	15,456	6%	5,970	8%
% renter occupied housing units <=50% 90 A1 A1 A2 62 65 70 % renter occupied housing	25 to 79 20 to 84 25 to 89 20 to 94 20 ver 95	75,364 83,217		16 366	1 4 / 0	488	26%	29,113	12%	10,391	14%
occupied housing units <=50% 90 Ov A1 A1 A2 A2 65 70 % renter occupied housing	0 to 84 5 to 89 0 to 94 Over 95	83,217	18%	10,500	15%	296	16%	33,719	14%	11,685	16%
housing units <=50% 90 0v Al Av 62 65 70 % renter occupied housing	25 to 89 20 to 94 Over 95			20,542	19%	231	12%	41,063	17%	13,528	18%
units 85 <=50% 90 Ov A1 Av 62 65 70 % renter occupied housing 95	0 to 94 Over 95	72.000	19%	22,685	20%	181	10%	46,996	19%	13,355	18%
% renter occupied housing	Over 95	73,999	17%	19,775	18%	106	6%	42,969	18%	11,149	15%
Al Av 62 65 70 % renter occupied housing		42,787	10%	11,051	10%	44	2%	25,685	11%	6,007	8%
% renter occupied housing		12,225	3%	3,145	3%	20	1%	7,436	3%	1,624	2%
% renter occupied housing	AII (III)	428,884	100%	110,884	100%	1,854	100%	242,437	100%	73,709	100%
% renter occupied housing	Avg Age	78		79		71		79		78	
% renter occupied housing	2 to 64	31,456	7%	2,883	4%	210	25%	20,203	7%	8,160	10%
% renter 75 occupied 80 housing 85	5 to 69	60,965	14%	8,843	12%	234	28%	37,809	14%	14,079	17%
occupied housing	0 to 74	69,381	16%	11,853	16%	156	18%	42,538	15%	14,834	18%
housing 00	5 to 79	77,440	18%	13,928	19%	92	11%	48,150	17%	15,270	18%
	0 to 84	78,369	18%	14,626	20%	80	9%	50,239	18%	13,424	16%
units -	5 to 89	65,195	15%	11,753	16%	44	5%	43,318	16%	10,080	12%
50% 90	0 to 94	37,351	9%	6,660	9%	25	3%	25,232	9%	5,434	7%
Ov	Over 95	11,535	3%	1,976	3%	5	1%	7,904	3%	1,650	2%
Al	\11	431,692	100%	72,522	100%	846	100%	275,393	100%	82,931	100%
	Avg Age	78		79		71		78		76	
	2 to 64	27,181	10%	681	5%	76	25%	3,814	9%	22,610	10%
	5 to 69	44,509	16%	2,063	16%	81	26%	6,465	16%	35,900	16%
· · · · · · · · · · · · · · · · · · ·	0 to 74	44,204	16%	2,357	18%	54	18%	6,861	17%	34,932	16%
	5 to 79	46,662	17%	2,545	19%	40	13%	7,221	18%	36,856	17%
Unknown	0 to 84	46,870	17%	2,511	19%	23	8%	7,098	17%	37,238	17%
85	5 to 89	37,827	14%	1,961	15%	21	7%	5,723	14%	30,122	14%
	0 to 94	21,355	8%	950	7%	7	2%	3,021	7%	17,377	8%
	Over 95	6,820	2%	240	2%	4	1%	992	2%	5,584	3%
Al		275,428	100%	13,308	100%	306	100%	41,195	100%		100%
	Avg Age	77		78		72		77		77	
	2 to 64	85,031	7%	8,044	4%	774	26%	39,473	7%	36,740	10%
· · · · · · · · · · · · · · · · · · ·	5 to 69	158,306	14%	23,746	12%	803	27%	73,387	13%	60,370	16%
	0 to 74	175,651	15%	30,576	16%	506	17%	83,118	15%	61,451	16%
	5 to 79	199,466	18%	37,015	19%	363	12%	96,434	17%	65,654	17%
· · · · · · · · · · · · · · · · · · ·	0 to 84	208,456	18%	39,822	20%	284	9%	104,333	19%	64,017	17%
	5 to 89	177,021	16%	33,489	17%	171	6%	92,010	16%	51,351	14%
	0 to 94	101,493	9%	18,661	9%	76	3%	53,938	10%	28,818	8%
· · · · · · · · · · · · · · · · · · ·		30,580	3%	5,361	3%	29	1%	16,332	3%	8,858	2%
Al Census data take	Over 95	l l		1							