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Home Forward's Aging in Place Initiative: Planning for Current and Future Residents

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Home Forward's Aging-in-Place Initiative

Planning for the Aging in Place of Current and Future Residents. A report by Portland State University's Institute on Aging

February 2012

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Executive Summary

This report was prepared on behalf of the Aging in Place Initiative of Home Forward. The Initiative sought to gather information about older persons currently residing in Home Forward's public housing properties, from persons age 55 and older on the waitlist for housing, and from older adults in the Portland area. While local data were unavailable at the time of this report, we know that nationally, more than one-third (37 percent) of the approximately 5 million households receiving housing assistance from HUD are headed by persons age 62 and older. With this in mind, Home Forward must make decisions now about how to respond to the aging of both current residents and the local community.

The population of older persons has and will continue to increase in Multnomah County, and Oregon. While many older persons enjoy relative economic stability, a sizeable number are very poor and face housing instability and declining health. According to the 2010 U.S. Census, the poverty rate among county residents age 65 and older is 10.9%, higher than the national average of 9%. A recent study of Multnomah County adults with incomes at or below 200% of poverty level found that 44% of those who had moved in the prior five years had done so to reduce housing costs.

Lessons about people age 55 and older who applied for public housing or the Section 8 program and are now waitlisted:

- They are diverse
 - They range in age from 55 to 96, just over half are female, and 42% identify as non-White or multi-racial
 - Over half live alone
 - One-fifth had been homeless in the prior 12 months
 - They have very low incomes and are in poor health
 - 62% have annual household incomes of less than \$10,000
 - Most describe their health as fair or poor
 - About 28% report receiving assistance with activities like shopping, getting around the city, household tasks, laundry, and food preparation
 - Over 40% reported food insecurity in the prior 30 days
 - 71% receive SNAP, or food assistance
 - They have varied housing preferences, though most still want to move
 - Nearly 58% applied only to Home Forward, and over 90% are still interested in moving, with over one-fourth wanting to move in the next month
 - Fewer than half want to move into age-restricted housing (e.g., age 55 and older), but 44% indicated interest in housing with services such as housekeeping and meals
 - Preference for senior housing was statistically associated with living alone and with poor health, but not with age or gender
 - The public housing applicants differed from the Section 8 program applicants, with more public housing applicants reporting the lowest income, having been homeless, and food insecurity
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In sum, these figures suggest that access to affordable housing is a pressing concern for many older persons, and that public housing (rather than Section 8) is especially attractive to persons who are the poorest and possibly most vulnerable.

Lessons from current Home Forward residents age 55 and older based on four focus group interviews with 25 persons:

- Most residents want to age in place for as long as possible, and many currently receive services from various agencies
- Most are not interested in living in age-restricted housing, though most do not want to live with children. Those who did like to have families with children, or an on-site day care facility where they might volunteer, identified as either African American or Asian
- Current residents have generally positive attitudes about Home Forward as a housing operator, though they had suggested changes as well. The main categories for improvement include
- Building changes: modifications to improve handicapped accessibility, safety (including emergency response within the apartment units), and to create a less institutional feeling
- Program-specific: more social and recreational activities, both on-site and off-site (e.g., trips). Activities should appeal to a wide range of ages and cultural preferences. Addressing the social environment (e.g., cliques, inappropriate visitors or activities such as drug use or prostitution)
- Services and Supports: Increased access to resident services, including weeknight and weekend hours; emergency response that does not require a 911 call; continued access to visiting nurses and social workers; training of resident services staff
- Management: Increase the stability and consistency of managers over time; managers need to listen and respond to older resident's concerns
- Interest in on-site assisted living: Nearly all focus group participants liked the idea of converting one floor of their building to an assisted living residence where they could access health services and possibly move into if needed in the future

Lessons from Portland area residents age 55 and older based on four focus group interviews with 18 persons:

- About half were interested in age-restricted housing
- Most have positive impressions of Home Forward, but many were uncertain about the difference between this agency and others such as Northwest Pilot Project, HUD, and Aging and Disability Services
- Some have very negative impressions of Home Forward properties and residents, with comments made about crime, noise, and unkempt premises
- The importance of good management to alleviate problems was discussed
- African American participants described an interest in housing that accommodates extended family who might either provide care, or need care from their parent/grandparent
- Participants agreed that an on-site assisted living unit would be a good addition to a Home Forward property because it could prevent residents from moving to a nursing home

Lessons from a market study of the demand for affordable housing among low-income older persons:

The shortage in the supply of affordable housing is a major concern throughout our region. For this study a detailed market analysis of four areas found that, of those areas, only the Downtown region has an adequate number of affordable units. In rank order, the areas with the highest demand include New Columbia (less than 10% of low-income seniors now served), Gresham (17% of low-income seniors now served), and Lloyd District (about 25% of low-income seniors now served).

Data collection for this report took place in the Summer of 2011.

Key Implications

Demand for Affordable Housing Among Older persons: There is clearly an immediate need for affordable housing among low-income older persons, based on the demographics of Multnomah county, the survey of Home Forward's waitlisted applicants age 55+, and the market analysis. Nearly 58% of waitlisted survey respondents are not on other affordable housing waitlists; this translates into 735 older persons who are seeking housing support from Home Forward. Over one-fourth of these respondents want to move in the next month, another sign of urgent need.

Building-Specific Implications: The physical appearance of buildings are perceived as institutional and not accommodating to the specific needs of frail older persons.

Supportive Service Implications: The housing and service needs of older persons on the waitlist for public housing and the Section 8 program is of concern, with individuals reporting poor health, food insecurity, and homelessness. Current Home Forward residents are interested in increased access to on-site supportive services, possibly an entire floor of licensed assisted living.

Older persons do not appear to have a strong preference for age-restricted housing: Those that expressed an interest in senior housing were more likely to be in poor health, providing further evidence of the need for supportive services like housekeeping, meals, and health monitoring. Waitlisted individuals who expressed a preference for senior housing are more likely to be in poor health, providing further evidence of the need for supportive services like housekeeping, meals, and health monitoring

System-Level Implications: Combining housing and services for older persons requires system level changes and partnerships with experts in senior housing and with state agencies that fund health and community-based services (e.g., Medicaid, Oregon Project Independence).

Why should Home Forward plan for an aging population?

The demographic shift toward an increasingly aged population during the next twenty years represents new challenges for housing providers across the country, particularly for providers of subsidized housing who will be expected to adapt to the changing needs of residents. A recent report commissioned by the U.S. Department of Housing and Urban Development (HUD) found that more than one-third (37 percent) of the approximately 5 million households receiving housing assistance from HUD are headed by persons age 62 and older (Locke, 2011). As the largest provider of affordable housing in Multnomah County, it is critical that Home Forward is prepared to meet the needs of current residents who are aging in place, as well as low-income older persons from the community who need affordable rental housing. Demographic changes mean that Home Forward is and will continue to be a provider of affordable senior housing.

Older Adults in Multnomah County

The population of older adults in Multnomah County has and will continue to increase dramatically over the next 30 years (Tables 1 & 2). Projections indicate that by 2020, the population of those aged 55 and older will be more than 200,000 and by 2040, it is expected to be at least 270,000 in Multnomah County alone (Table 2). The fastest growing age cohort in the U.S. is older adults aged 85 and older, of which there were about 11,000 in Multnomah County in 2008 (ADS, 2011). Furthermore, the state of Oregon predicts that Medicaid caseloads for seniors in Multnomah County will almost double, from 5,500 to 10,000 during the next twenty years.

| Table 1. Population Profile, 2000-2010 | | | | |
|---|-------------|-------------|-------------|---------------|
| | 2000 | 2005 | 2010 | Change |
| Total Population | 660,486 | 692,825 | 724,671 | +64,185 |
| 60+ | 94,567 | 91,648 | 104,083 | +9,516 |
| 85+ | 10,778 | 10,852 | 12,495 | +1,717 |
| 60+/Fed. Poverty Level | 8,936 | 9,018 | 9,944 | +1,008 |

Table 1: Population Profile of Multnomah County, 2000-2010.
Source: ADS Older Americans Act Area Plan 2008-2010, ADS, 2011.

The Oregon Department of Human Services predicts that over the next 20 years the number of people needing long term care will increase 45%, from about 31,000 to about 56,000. This translates to an almost 30% increase in the proportion of individuals (seniors and people with disabilities) needing long term care throughout the county. It is estimated that 79% of women and 58% of men who turn 65 today will need some form of caregiving during the remaining years of their lives (Golant, 2008). And the prevalence of

disability among subsidized housing residents is greater than the general public (Redfoot and Kochera, 2004). In a 1999 survey of HUD Section 202 properties, managers estimated that 22% of residents were disabled or frail compared with only 13% ten years earlier (Heuman, Winter-Nelson and Anderson, 2001). The survey also showed that the proportion of residents having difficulty preparing meals or performing personal care tasks increased almost fourfold between 1988 and 1999 (Heuman, Winter-Nelson and Anderson, 2001). A 2001 survey of LIHTC properties asked managers to estimate the number of tenants who were frail or disabled (defined as having difficulty walking or performing everyday tasks) and their responses indicated that close to one-third of the residents were frail or disabled (Kochera, 2002).

| Table 2. Multnomah County – Population Forecast | | | | | | | | | |
|--|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|-----------------------|
| Year | Total population | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85+ | 55+ population |
| 2015 | 735,445 | 48,731 | 44,979 | 34,762 | 21,096 | 13,296 | 8,850 | 11,059 | 182,773 |
| 2020 | 756,390 | 48,780 | 44,972 | 40,626 | 30,514 | 17,263 | 9,887 | 10,445 | 202,487 |
| 2025 | 778,028 | 51,841 | 45,289 | 40,967 | 36,135 | 25,477 | 13,215 | 11,431 | 224,355 |
| 2030 | 800,565 | 55,601 | 48,440 | 41,598 | 36,887 | 30,743 | 20,064 | 14,700 | 248,033 |
| 2035 | 821,768 | 53,922 | 52,113 | 44,688 | 37,644 | 31,624 | 24,496 | 21,240 | 265,727 |
| 2040 | 842,009 | 50,498 | 50,604 | 48,271 | 40,637 | 32,495 | 25,462 | 28,600 | 276,567 |

Table 2: Multnomah County – Population Forecast, 2015-2040. Source: Office of Economic Analysis, State of Oregon, April 2004. Base population of July 1, 2000: Totals estimated by PRC, PSU and age-sex details estimated by OEA based on Census Bureau's distributions.

A 2008 survey of Multnomah County residents age 55 and over with household incomes at or below 200% of the federal poverty level, found that housing affordability was a major concern. Eighty-six percent of renters and 68% of homeowners in the sample were spending more than 30% of their income on housing (Baggett and Neal, 2009). While the majority of those surveyed said they wanted to stay in their current residence for as long as possible, 44% of those who had moved in the past five years had done so to reduce their housing costs (Baggett and Neal, 2009). Many of the older adults surveyed were also very concerned with their ability to find affordable housing when needed, with only 13% of renters believing it would be possible (Baggett and Neal, 2009). As segments of the private rental market become further out of reach for low-income renters, many look to the few affordable housing alternatives still available.

Growing Diversity of Multnomah County

In addition to larger numbers of older persons, data also show that the diversity of the population is increasing slightly in Multnomah County (Table 3 & Figure 1).

| Table 3. Race, Ethnicity of 60+ Population, 2000-2010 | | | |
|---|------|------|------|
| | 2000 | 2005 | 2010 |
| White | 89% | 89% | 88% |
| Black | 5% | 4% | 4% |
| Asian/Pacific Islander | 5% | 6% | 6% |
| American Indian | 1% | 1% | 1% |
| Hispanic (may be of any race) | 2% | 2% | 3% |

Table 3: Race, Ethnicity of 60+ Population in Multnomah County.
Source: ADS Older Americans Act Area Plan 2008-2010, ADS, 2011.

Figure 1. Diversity in Multnomah County

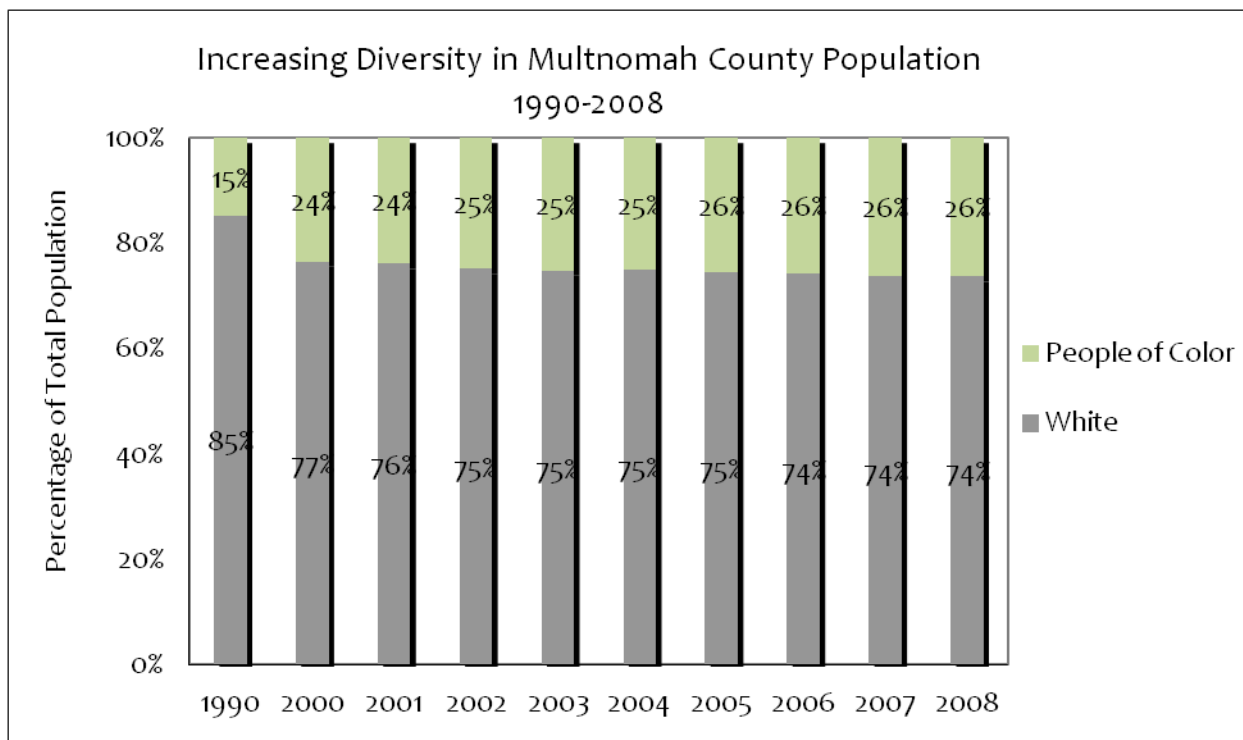


Figure 1 – Increasing Diversity in Multnomah County Population, 1990-2008. Source: Curry-Stevens, A., Cross-Hemmer, A., & Coalition of Communities of Color (2010). *Communities of Color in Multnomah County: An Unsettling Profile*. Portland, OR: Portland State University.

In Multnomah County, international immigrants made up 90% of the net migration gains between 2000-2009 (U.S Census, 2010). This represented a much higher percentage than other counties in Oregon, which were all under 50% (U.S. Census, March, 2010). As such, the foreign-born population is steadily increasing in Multnomah County, particularly among the Slavic, African, and Chinese communities. The U.S. Census Bureau reports that the population of foreign-born persons between 2005-2009 in Multnomah County was 13.3% of the population, as compared to 9.5% of the overall state population. The Federation for American Immigration Reform (FAIR) estimated that the foreign-born population in Multnomah County in 2008 was about 97,955, or 13.7% of the population (FAIR, 2011). This represents a 16.7% increase over the 2000 Census; a much larger increase than the 7.0 percent increase in the native-born population. The Hispanic population has doubled over the last 10 years in the Tri-County metropolitan area and Multnomah County's Asian and Pacific Islander population increased from 36,343 to over 86,000 between 1996 and 2000 (U.S. Census, 2010; IRCO, 2011). According to the Oregon Refugee Program (2011), the number and ethnic diversity of African refugees in particular will continue to increase over the next few years. Multnomah County Aging and Disability Services reports that the dominant language groups they serve are Russian, Spanish, Chinese (both Cantonese and Mandarin), Vietnamese and Korean . They also serve smaller numbers of persons who speak Cambodian, Somali, Tigrinya and Amharic, Romanian, Serbo-Croatian, Hindi, Tagalog, Farsi, Nepalese and Burmese (J. Mandel, personal communication, September 23, 2011).

Poverty levels among Multnomah County's communities of color are at levels at least double those of non-Hispanic whites, particularly among older adults (Curry-Stevens, Cross-Hemmer & Coalition of Communities of Color, 2010). Median household incomes are much lower among communities of color (\$37,516), as compared with Whites (\$53,149), and are much lower among African immigrant households (\$26,679). In Multnomah County, African immigrants make up the fourth largest immigrant community after Latino, Asian, and Slavic. While the population of African older adults in Multnomah County who are 65 and older makes up only 4.3% (190) of the population, the 35-64 age group makes up 39.2% (1,714) of the African population in the county. Over the next 30 years, this cohort will increasingly need housing environments that can support aging in place. Poverty rates among Slavic immigrants are higher than among their White counterparts, with Slavic individuals in poverty at a rate of 15.4%, as compared to 11.7% among White individuals in 2008. Nearly 58% of Slavic immigrants in Multnomah County were paying more than 30% of their incomes on housing in 2008, as compared to 54.1% of Whites. As the populations of older adults, communities of color, and immigrant populations continue to grow, affordable housing that supports the needs of a diverse population of older adults as they age in place will become increasingly important.

Review of Existing Literature on Aging in Place Practices

Best Practice Models for Aging in Place

Miami, Florida: Helen Sawyer Plaza

One of the earliest examples of a subsidized housing development addressing aging in place was the Helen Sawyer Plaza, a 104 unit building that converted into an assisted living facility. In 1999 the Miami-Dade County Housing Authority acquired HUD funding to modernize the existing structure in order to make it accessible for older residents. Prior to completing the building's remodel, the housing authority obtained a license from the State of Florida to operate as an assisted living facility, with the cost of services covered by a special state Medicaid waiver allocation. The waiver pays for a variety of resident services, including medication supervision, personal care, and other supportive services primarily provided by on-site staff (Stone, Harahan and Sanders, 2008). Though the program was ultimately a success and still exists today, its creators acknowledged that various levels of government with differing objectives, timelines and funding streams made this a very complex process (Milbank Memorial Fund, 2006).

Glastonbury, Connecticut: Herbert T. Clark House

The Herbert T. Clark House is a project of the Housing Authority of the Town of Glastonbury, Connecticut. The residence is made up of 25 apartments with a level of care consistent with assisted living. It is adjacent to a 45-unit building, also owned by the Glastonbury Housing Authority, which offers congregate housing with a less intensive level of service provision (Glastonbury Housing Authority, 2009). Similar to Neville Place, the supportive services at the Clark House are provided by an outside agency licensed to provide assisted living services. All apartments are affordable to older adults whose household income is less than 60% of the Area Median Income (AMI), with several units available to households with incomes between 25- 50% AMI (Glastonbury Housing Authority, 2009). Funding for services comes from a variety of sources including Medicaid's HCBS waiver program, Connecticut's Home Care Elder Program and a special subsidy from the Connecticut Department of Economic and Community Development. Utilizing these various funding sources has allowed for greater flexibility in terms of participant eligibility.

Milwaukee, Wisconsin: Lapham Park

Lapham Park is a 200-unit public housing development, originally constructed in 1964 and designated as an elderly-only property in 1993. Lapham Park offers residents access to a continuum of care that addresses preventative, acute, and long-term care needs. The development functions as a partnership between the Milwaukee Housing Authority, Milwaukee County Department of Aging, a PACE program through the Community Care Organization and the St. Mary's Family Practice Clinic co-located at the site. Residents can get their routine medical needs met through St. Mary's Clinic, while acute, primary, specialty and long-term care is provided by the PACE program. In addition to the primary partners, several educational institutions also send students to the property to provide services to residents (e.g. Milwaukee Area Technical College Dental program, St. Mary's Family Practice and Community Education Center Student Program, Marquette University School of Nursing). In order to accommodate the enhanced services at Lapham Park, the

housing authority significantly rehabbed the building's basement, adding several community spaces and a medical clinic (Adapted from Leading Age Center for Applied Research, 2011).

Seattle, Washington: The Langdon and Anne Simons Senior Apartments

The Langdon and Anne Simons Senior Apartments were constructed in 2008 by Seattle's Plymouth Housing Group. This LIHTC property consists of 92 studio apartments designed for seniors and military service veterans who are age 55 and older. Five of the 92 units are fully handicap accessible with lowered work surfaces and fully equipped with grab bars, and an additional eleven units are equipped with grab bars in the bathroom, but without lowered work surfaces. The bathrooms in every unit have a five-foot turning radius for wheelchairs and can be easily be retrofitted for grab bars. Residents in the building are eligible to receive ongoing case management from one of the four on-site case managers. Three staff offices are located near the resident lounge in order to accommodate case managers and visiting health care professionals (e.g. RN, podiatrist, and dentist visit; housekeeping, transportation, social, coordination with other agencies). The major funders that came together to make this project possible include National Equity Fund, Inc., City of Seattle, State of Washington, Washington State Housing Finance Commission, King County, Key Bank, Federal Home Loan Bank of Seattle with Sterling Bank, Washington Community Reinvestment Association, and the Seattle Housing Authority (Carder and Zoller, 2009)

San Francisco, California: Presentation Senior Community

Presentation Senior Community is a 93-unit Section 202 property co-located with an adult day health center, which serves individuals from the housing property as well as the surrounding community who are at risk for nursing home placement. Presentation Senior Community is a property of Mercy Housing California and the adult day health center is operated by a partnering organization, North & South Market Adult Day Health. Approximately half of the residents participate in the day health program, which provides a variety of services, including nursing care; personal care, social work services; physical, occupational and speech therapy; podiatry services; mental health support; case management; transportation; and a daily meal. The day health program is also able to coordinate in-home aids from the state's In-Home Supportive Services program for residents. Residents who are not enrolled in the adult day health program still can still receive assistance through a resident service coordinator and a variety of other community organizations (Adapted from Leading Age Center for Applied Research, 2011).

Best Practices in Built Environments for Aging In Place

Adaptations to the living environment can increase ease of use, safety, security, independence and improve the overall quality of life for aging individuals. A supportive and accessible environment makes it easier to carry out tasks such as cooking and cleaning and oftentimes modifications such as ramps or stair lifts allow older adults to continue to engage in major life activities. Safety features such as handrails on the stairs, outside ramps, and grab bars in the bathroom help prevent falls and other accidents. Providing adequate space for caregiving by relatives and friends may minimize the need for costly personal care services (Pynoos, Mayeda and Lee, 2003).

When thinking of adaptations that support aging in place it helps to consider the five senses and the ways in which they change. Over time our senses become less acute, requiring greater sensory input in order to be aware of various sensations.

Vision

The sharpness of vision declines and pupils typically become smaller, requiring higher levels of lighting and sharply contrasted colors. Color contrast can help with way-finding and depth perception. A person aged 65 or older needs twice as much light as does a 20-year old (Siewe, 2009).

Hearing

Ears play a dual role: hearing and maintaining balance. In addition to impacting the ability to communicate, deterioration with age can effect balance. It is estimated that nearly a third of all people over age 65 have significant hearing impairment (Dugdale and Zieve, 2010).

Touch

Circulation also changes, effecting sense of touch. Older persons are less sensitive to hot and cold water for instance. Things like opening up a jar or even handling silverware can become a challenge. Those who have diabetes, different types of arthritis or vascular diseases may find this even more challenging.

Smell and Taste

Sense of smell becomes less distinct and the ability to detect and figure out what certain odors are starts to decline. The ability to taste the intensity of some foods begins to diminish as well, affecting nutrition. Indoor air quality is also an important consideration when planning housing for older persons. Weakened immune systems and other age-related health problems leave older persons more vulnerable to health complications associated with indoor air pollution, often triggering or exacerbating breathing problems (Belew, 2010).

Over the last several decades, architects, designers, builders and gerontologists have recommended many of the following adaptations and features to support aging in place. While some of these suggestions are only practical in new construction, others are feasible modifications for existing structures.

Bathrooms

- In general, showers are thought to be safer than bathtubs. However, many senior housing developments find it useful to have a handicapped-accessible Whirlpool tub for occasional resident use.
- Showers should be curbless and a minimum of 36 inches wide; designs without thresholds allow easier access.
- Adjustable/removable shower heads with a 6 foot hose that allows for hand-held use.
- Light inside the shower stall.
- Anti-scald regulators to prevent burns.
- Bathtubs should be lowered for easier access.
- Bracing in walls around tub, shower, shower seat and toilet for installation of grab bars to support 250 - 300 pounds.
- Single-lever handles, large, easy-to-twist dials and loop pulls allow for easier manipulation.
- Wheelchair maneuverable bath with 60-inch turning radius or acceptable T-turn space and 36-inch by 36-inch or 30-inch by 48-inch clear space.
- Toilets should be 2 ½ inches higher than standard toilets (17 to 19 inches) or height-adjustable.
- Wall-hung sink with knee space and panel to protect wheelchair users from pipes.

Kitchens

Reaching range is an important consideration when designing a kitchen for aging in place. When things are out of reach accidents and falls are more likely. Keeping things within reach for older persons may require the design of a larger kitchen.

- Upper wall cabinetry should be approximately 3 inches lower than conventional height.
 - The range and sink areas should be well lit and may be enhanced with task lighting.
 - Countertop space and height should be ample to keep carrying and lifting to a minimum.
 - Work surfaces should not be shiny or glaring.
 - Cabinet shelving can be replaced with drawers or pull-out components.
-
-

- Oven controls should be clearly marked and easily grasped.
- Safe and nonslip flooring is important for preventing falls.
- Accented stripes on edges of countertops can provide visual orientation to the workspace.
- Bright, non-glare task lighting over sink, stove, and work areas.
- Easy-access side-by-side refrigerator/freezer or under-counter, drawer-style refrigerator.

Bedrooms

- Carpeting can help acoustically and aesthetically, but too much padding may be a tripping hazard. If carpeted, use low (less than ½ inch high pile) density, with firm pad.
- Light switches, thermostats and other environmental controls should be in accessible locations no higher than 48 inches from floor.
- Rocker or touch light switches placed at the entrance to each room or hall.
- Electrical outlets should be placed at least 18 inches off the floor.

Hallways/Corridors/Stairways

- Long corridors and architectural monotony can make way-finding difficult. Simple building configurations with L-, H-, or square-shaped corridors are best for spatial orientation.
- Hallways should be designed to be a minimum of 48 inches wide.
- Entryways should have 32 inches of clear width, which requires a 36-inch door.
- Use of room numbers, distinguishing colors or use of significant memorabilia can be helpful for way-finding.
- Sturdy hand railings along both sides of the hallway or stairway (1 ¼-inch diameter).
- Room entrances should not have raised door thresholds. Thresholds and sills can be tripping hazards for older adults and individuals with mobility impairments. If there are thresholds, they should be a maximum of ½ inch beveled (exterior) or a maximum of ¼ inch (interior).
- Prominently featured stairways encourage use of stairs over elevators.
- Avoid floor patterns and dark lines because they can be disorienting for aging eyes.
- Hallways should be well lit, with a minimum of 60 watt bulbs.
- Differences in surface friction and level changes can be difficult for individuals with walkers and wheelchairs to navigate.

Common Areas

- Views to activities and interesting focal points can generate conversation and promote the use of social spaces.
- Non-institutional settings (or home-like environments) have been found to improve intellectual and emotional well-being and enhance social interaction.
- Placement of furniture in small flexible groupings in public spaces such as lounges and seating areas can encourage social interaction.
- Washing machines and dryers should be raised 12 to 15 inches above the floor; front loading laundry machines are preferable.

Top 11 Home Modifications for Seniors

February 2011

The U.S. Department of Housing and Urban Development reported that these items were most often included in home modifications and aging in place improvements for senior's homes:

1. Levered doorknobs
2. Grab bars in bathrooms
3. Levered faucets in kitchen sink
4. Handrails on both sides of stairwells and on front and rear steps
5. Grab bars in showers
6. Removal of any door threshold
7. Movable shower heads for those who must sit
8. Portable shower seats
9. A bathroom with a bath/shower and a bedroom on the first floor
10. Widened doors to accommodate wheelchairs
11. Ramps for those using walkers and wheelchairs

System-Level Initiatives that Promote Aging in Place

The various affordable housing and supportive service models across the United States are known by a range of terms such as permanent supportive housing, enriched housing, and affordable housing plus services (AHPS). The Institute for the Future of Aging Services includes three elements in its definition of AHPS:

1. independent, unlicensed, largely subsidized multi-unit housing where large numbers of low- and modest-income older adults live;
2. available health-related and supportive services, funded separately from the housing, and
3. a “purposeful linkage” between residents and services (Harahan, Sanders & Stone, 2006).

There are several potential advantages to AHPS. First, economies of scale can be achieved by bringing services to large numbers of persons in one place. Second, comprehensive services can be provided more effectively. Third, with this approach, persons who need assistance do not have to seek services alone. Finally, it can extend aging in place opportunities not always available to lower-income persons (Golant, 2008). The New York City Housing Authority recently conducted an assessment of more than 1,000 housing authority residents age 65 and older and found that, “For many older adults, residence in public housing provides an opportunity to age in place, remaining a part of the communities where they have lived for most of their lives” (Parton, 2011, p. 35).

Linking housing with services can improve the quality of life of many older persons. System level initiatives to promote aging in place are those that include coordination with agencies other than Home Forward, and policies at the local, state, and/or national level. A recent forum on AHPS concluded that a system approach rather than a patchwork of housing and supportive services with some residents qualifying based on age, income, or medical need and others not eligible for any services, is needed to support aging in place (Leading Age Center for Applied Research, 2011).

The U.S. Department of Housing and Urban Development has three programs that respond to aging in place:

1. Service coordinators in multifamily housing who help elderly and disabled residents obtain needed supportive services from community agencies. Eligible grantees include owners of Section 202, Section 8, Section 221(d)(3) below-market interest rate, and Section 236 developments. Service coordinators assess resident needs; identify and link residents to appropriate services, and monitor the delivery of services. Services involve support with activities of residents' daily living (ADLs), such as eating, dressing, bathing, grooming, transferring, and home management. A service coordinator may also educate residents about what services are available and how to use them, and help residents build informal support networks with other residents, family, and friends.

2. Assisted Living Conversion Program. The ALCP provides funding for the physical costs of converting some or all of the units of an eligible development into an ALF, including the unit configuration, common and services space and any necessary remodeling, consistent with HUD or the State's statute/regulations (whichever is more stringent). There must be sufficient community space to accommodate a central kitchen or dining facility, lounges, recreation and other multiple-areas available to all residents of the project, or office/staff spaces in the ALF. Funding for the supportive services must be provided by the owners, either directly or through a third party, such as Medicaid. Oregon has a Medicaid waiver to pay for assisted living services on behalf of individuals who qualify both financially and medically for nursing home care. Only private nonprofit owners of Section 202, Section 8 project-based [including Rural Housing Services' Section 515], Section 221(d)(3) BMIR, Section 236 housing developments that are designated primarily for occupancy by the elderly for at least five years are eligible for funding. For a listing of ALCP funded projects refer to Appendix F. Source: http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/progdesc/servicecoord

3. Congregate Housing for the Elderly Program (CHSP). Home Forward operates CHSP in four properties.

A recent summit on aging in place in public housing identified several system level elements necessary for success, including a public health approach that plans for population-based needs rather than focusing on high-risk individuals, sustainable funding sources for service coordinators (e.g., Medicaid, state funds, resident payments), evidence to prove that aging in place strategies work, an organized strategy for sharing information across housing providers and locations, and an organizational culture in which housing authorities are viewed as part of the service network (Leading Age Center for Applied Research, 2011). Specific policy-level strategies raised during the summit include:

- A state or regional policy directive or incentive could be promoted that redefines housing authorities as service providers rather than a portfolio of real estate
- Clarification about fair housing rules and assessment of resident's health and social needs
- Stable funding for non-Medicaid and lower-risk populations

Housing authorities must decide if services are to be provided, whether to provide them directly or in collaboration with other agencies (e.g., a home health agency, the Program of All Inclusive Care for the Elderly, or PACE), whether to group residents by need or use a scattered site approach, whether services should be available on an a la carte or as a package of services. One typology of service levels available in AHPS grouped them as follows (Milbank Memorial Fund, 2006):

Basic level services:

- Food
- Health promotion and disease prevention
- Recreation

- Transportation
- Information about, and referral to, desired services
- Medication assistance
- Cognitive assistance

Moderately intensive services:

- Basic level services
- Care management for individual seniors and coordination of services from all of the partners
- Assistance with activities of daily living (e.g., transfer from place to place in the residence, toileting, eating, bathing)
- Assistance with instrumental activities of daily living (e.g., shopping, paying bills, arranging and getting to appointments)
- Medication assistance
- Cognitive assistance
- Adult day care

The most intensive service level might include:

- Basic and moderately intensive services
- Physician services
- Home health services
- Rehabilitation services (outpatient and inpatient)
- Assisted living environments and services (including twenty-four-hour staff)
- Nursing home environments (intermediate and skilled) and services (including twenty-four hour staff)
- Medication administration (as allowed by state regulation)
- Cognitive assistance

**Experiences and Preferences
of Older Persons with Low to
Moderate Incomes**
(Findings and Analysis)

In order to learn more about perceptions that older persons have about Home Forward as a provider of affordable housing, two sets of focus group interviews were held, one with current tenants of several public housing apartment buildings and the second with older persons in the Portland area. In addition, a mailed survey of persons age 55 and older on the Home Forward waitlist for both public housing and Section 8 vouchers was conducted in order to identify the characteristics and needs of older persons who need affordable housing. [More information about the research methods is available in Appendix A.]

A total of 25 current tenants of Home Forward properties participated in four groups; two in NW Portland, and two in NE Portland (with bus service from SE). The latter two included participants in the Congregate Housing Services Program. In order to gather perspectives from older persons who do not reside in Home Forward properties, but who might be financially eligible for public housing, 18 individuals were recruited from four locations: a senior center, two affordable housing properties managed by local not-for-profit companies, and a health clinic. These locations, based in NE, downtown, and outer SE Portland, were selected to include a range of people by income, race, and ethnicity.

The first set of focus group participants ranged in age from 56 to 86 (mean 66.5 years), and included more women than men (76%). None of these participants were currently married, most were White (76%), and all described English as their primary language (nearly all are U.S. born). Over half had taken some college courses or completed a college degree. All reported household incomes less than \$20,000 (See Appendix C for basic demographics of participants).

The second set of focus group participants ranged in age from 55 to 86 (mean 70.6 years), 58% were women, and about 28% were married. Most were White (58%), 22% were African American, and 17% were Asian or Native Hawaiian/Pacific Islanders. Eight were born outside the U.S. and the groups included those who speak mostly Russian (one group used a Russian interpreter) or Farsi. Over half had taken some college courses or completed a college degree. Three persons had annual household incomes over \$30,000.

The current Home Forward tenants were asked to describe what they think “aging in place” means, whether they plan to continue living in their building for as long as possible, what supports they now use or might need to stay in their apartment, if they prefer to live in buildings with only older persons or with persons of all ages, and whether they would be interested in a building that had on the first floor either a community center or child care center, or a building that had an entire floor converted to assisted living with 24-hour staff. [See Appendix C for the interview guide.]

The second set of focus group participants, recruited from the Portland-metro region, were asked to describe their impressions of low-income housing and Home Forward specifically, whether they prefer to live in senior housing or with people of all ages, whether they believe that Home Forward would be a good manager of senior housing, and whether they would be interested in a building that had on the first floor either a community center or child care center, or a building that had an entire floor converted to assisted living with 24-hour staff.

Survey of Waitlisted Individuals

A total of 345 persons completed the mailed survey, a response rate of 30.5% (see Appendix A for the methods description for the, and Appendix D for the survey). Only persons age 55 and older and on the wait list for public housing or Section 8 (or both) were included. The tables in this section indicate responses by those who were only on the public housing list versus the Section 8 list; seven individuals who were on both lists were not included so that comparisons could be made. Statistically significant differences between groups were found, as noted below.

Demographics

Persons age 55 and older who have been waitlisted are diverse as indicated in Table 4. They ranged in age from 55 to 96 (mean age of 63 years), nearly 10% were over age 75, just over half were female (57.6%), and 18.2% were married. Most reported that they had at least one child living in the Portland area. The majority were born in the U.S. (75.9%), and identified their race as White (58.0%), Black/African American (27.6%), Asian or Native Hawaiian/Pacific Islanders (10.5%), American Indian/Alaska Native (3.4%), or multiracial (2.8%). About 5% identified as Hispanic/Latino. When asked what language they were most comfortable speaking, most reported English (81.2%), followed by Russian (6.8%), with a few listing Vietnamese, Spanish, Japanese, or Korean.

Most respondents reported an annual household income of less than \$10,000 and one-quarter had incomes between \$10,000 and \$14,999. About 18% reported they did not complete high school, over one-third completed high school, nearly one-third completed some college, trade/vocational school, or an associate's degree. Eleven percent completed a 4-year college degree. Most were not currently employed, though 22% reported being unemployed and looking for paid work, and nearly 12% are employed.

Housing Status and Preferences

Most respondents (53.7%) reported living alone (see Table 4), and a small number were homeless (7.5%). About 20% reported being homeless in the prior 12 months, and nearly 18% responded that they might become homeless in the future (not shown). Nearly 58% reported the only waitlist they were on was the Home Forward list, though 14.5% were not sure whether they were on other lists. About one-quarter did not have a lease where they currently live, and nearly 40% rented month to month; and 22% had a year or multi-year lease. The average monthly rent currently paid by respondents was \$397 (standard deviation \$286), though public housing applicants paid less than current Section 8 applicants.

Most respondents (85%) lived in the metro region, with some living in other parts of Oregon, and a few in other states. Most lived in 97217 (n=31) which includes the North Portland neighborhoods of Overlook, Arbor Lodge, Portsmouth, and Kenton, followed by 97209 (n=27) including inner NW Portland areas of Old Town, Chinatown, and the Pearl District, 97233 (n=20) including outer SE Portland neighborhoods of Powellhurst Gilbert,

(continued on p.26)

Table 4. Characteristics of Waitlisted Applicants, Age 55+

| | PH N (%) | Section 8 N (%) | Total N (%) |
|---|-------------|--------------------|----------------|
| Age < 61 years | 126 (57.8) | 50 (45.9) | 176 (53.8) |
| Age ≥ 62 years | 92 (42.2) | 59 (54.1) | 151 (46.2) |
| Female | 128 (57.9) | 62 (56.9) | 190 (57.6) |
| Marital status | | | |
| Single | 106 (49.8) | 42 (39.3) | 148 (46.3) |
| Married/partnered | 33 (15.5) | 25 (23.4) | 58 (18.1) |
| Separated/divorced | 47 (22.1) | 22 (20.6) | 69 (21.6) |
| Widowed | 27 (12.7) | 18 (16.8) | 45 (14.1) |
| Race | | | |
| White/Caucasian | 126 (57.5) | 63 (58.9) | 189 (58.0) |
| Black/African American | 61 (27.9) | 29 (27.1) | 90 (27.6) |
| American Indian/Alaska Native | 10 (4.6) | 1 (0.9) | 11 (3.4) |
| Asian | 10 (4.6) | 10 (9.3) | 20 (6.1) |
| Native Hawaiian/Pacific Islander | 3 (1.4) | 0 (0.0) | 3 (0.9) |
| Multiracial | 5 (2.3) | 4 (3.7) | 9 (2.8) |
| Other | 4 (1.8) | 0 (0.0) | 4 (1.2) |
| Hispanic/Latino* | 4.7% | 5.8% | 5.1% |
| U.S. Born* | 78.4% | 70.9% | 75.9% |
| Primary language spoken | | | |
| English | 178 (84.8) | 81 (74.3) | 259 (81.2) |
| Russian | 10 (4.8) | 11 (10.1) | 21 (6.6) |
| Other | 22 (10.5) | 17 (15.6) | 39 (12.2) |
| Highest level education | | | |
| Some high school or less | 38 (18.4) | 22 (20.6) | 60 (19.2) |
| High school diploma/GED | 74 (35.9) | 37 (34.6) | 111 (35.5) |
| Various college*** | 61 (29.6) | 37 (34.6) | 98 (31.3) |
| Four-year college degree or higher | 26 (12.6) | 8 (7.5) | 34 (10.9) |
| Other | 7 (3.4) | 3 (2.8) | 10 (3.2) |
| Employment status | | | |
| Employed | 24 (12.4) | 10 (10.1) | 34 (11.6) |
| Not employed/not looking for work | 99 (51.3) | 59 (59.6) | 158 (54.1) |
| Not employed/currently looking for work | 44 (22.8) | 19 (19.2) | 63 (21.6) |
| Prefer not to answer | 26 (13.5) | 11 (11.1) | 37 (12.7) |
| Annual household income | | | |
| Less than \$10,000 | 147 (69.3) | 50 (46.3) | 197 (61.6) |
| \$10-\$14,999 | 42 (19.8) | 38 (35.2) | 80 (25.0) |
| \$15-19,999 | 12 (5.7) | 12 (11.1) | 24 (7.5) |
| \$20,000 or more | 11 (5.2) | 8 (7.4) | 19 (5.9) |

*Percentages based on respondents who said 'Yes' as compared to those who reported 'No' (not shown).

** 5-point scale (1 = excellent, 5 = poor). ***Some college, trade, vocational school, or associate degree

Hazelwood, Mill Park, and Centennial, 97203 (n=18) including the North Portland and St. Johns neighborhoods, and 97220 (n=18) including Parkrose, Maywood Park, Madison South, and Sumner.

Table 5. Current Housing Status of Waitlisted Applicants, Age 55+

| | Public Housing N (%) | Section 8 N (%) | Total N (%) |
|------------------------------------|---------------------------|----------------------------|---------------------------|
| Current living arrangement | | | |
| Alone | 116 (53.7) | 57 (53.8) | 173 (53.7) |
| With others | 81 (37.5) | 44 (41.5) | 125 (38.8) |
| Homeless | 19 (8.8) | 5 (4.7) | 24 (7.5) |
| Housing tenure | | | |
| < 12 months | 69 (34.0) | 11 (10.4) | 80 (25.9) |
| 12 months - 5 years | 90 (44.3) | 47 (44.3) | 137 (44.3) |
| > 5 years | 42 (20.7) | 46 (43.4) | 88 (28.5) |
| Not sure | 2 (1.0) | 2 (1.9) | 4 (1.3) |
| Lease | | | |
| Month-to-month | 69 (35.0) | 45 (45.5) | 114 (38.5) |
| 6 month | 12 (6.1) | 2 (2.0) | 14 (4.7) |
| 12 month | 30 (15.2) | 23 (23.2) | 53 (17.9) |
| > 12 month | 9 (4.6) | 4 (4.0) | 13 (4.4) |
| No lease | 61 (31.0) | 16 (16.2) | 77 (26.0) |
| Not sure | 16 (8.1) | 9 (9.1) | 25 (8.4) |
| On other non-HAP waitlist | | | |
| Yes | 63 (28.9) | 28 (26.2) | 91 (28.0) |
| No | 122 (56.0) | 65 (60.7) | 187 (57.5) |
| Not sure | 33 (15.1) | 14 (13.1) | 47 (14.5) |
| Current monthly rent (\$), (M, SD) | N = 218 (\$369, \$280) | N = 110 (\$ 453, \$292) | N = 328 (\$397, \$286) |

Current Wish to Move

Respondents were asked about their current wish to move. Only a small number no longer wanted to move (8.9%), and the majority wanted to move in the next year, with over one-fourth (26.6%) wanting to move in the next month, and about one-fifth not certain when they would want to move. Some differences between people on the public housing and Section 8 lists were found. Among the public housing applicants, the top six reasons for wanting to move were financial reasons, location of HAP housing, to be independent, paying too much for rent, size of current residence, and personal health. Among Section 8 applicants, the top six reasons were financial, paying too much for rent, size of current residence, to be independent, location of HAP housing, and personal health.

Table 6. Housing Preferences of Waitlisted Applicants, Age 55+

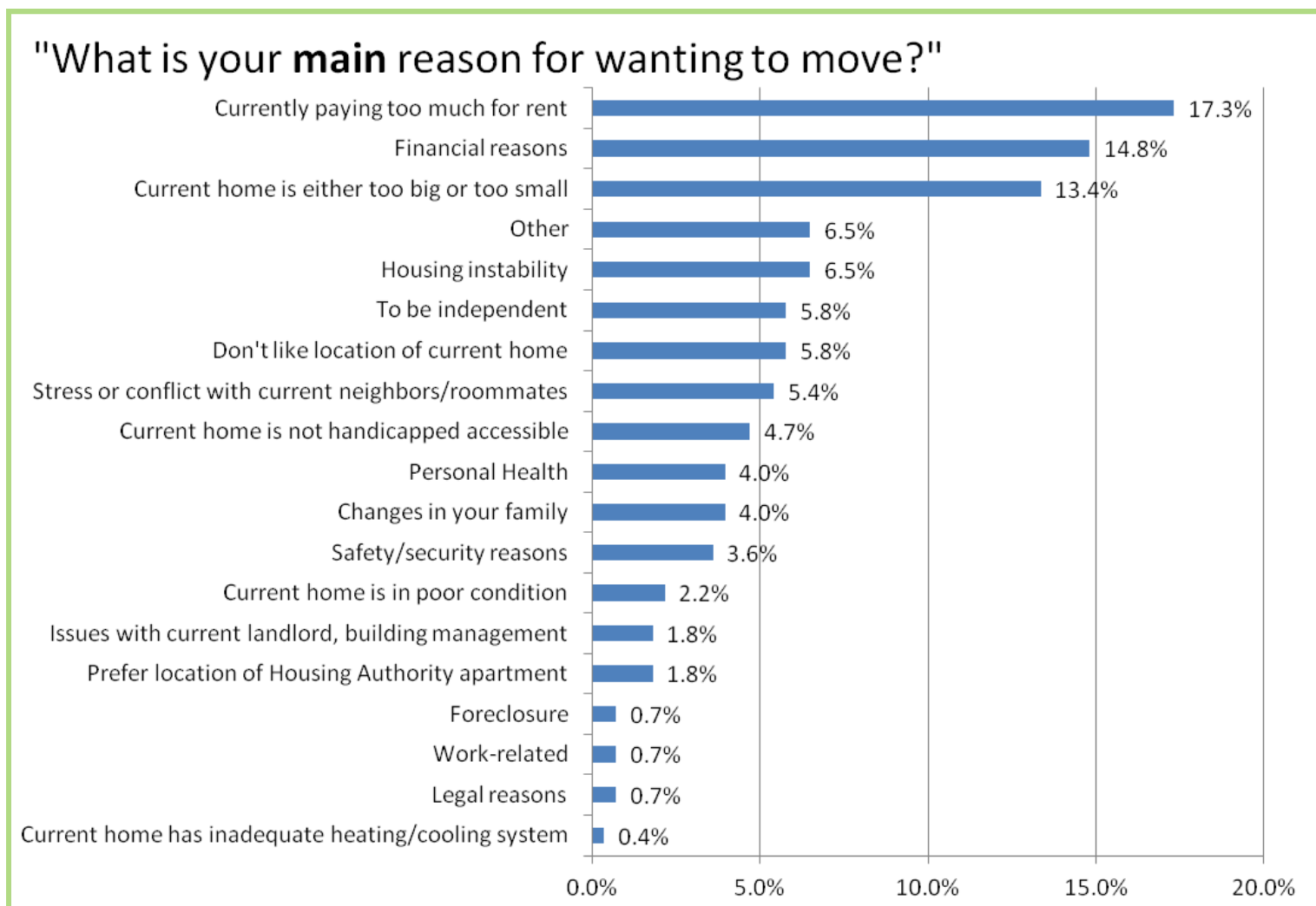
| | Public Housing | Section 8 | Total |
|---|-------------------------|------------------------|-------------------------|
| | % | % | % |
| Current wish to move | | | |
| <i>In the next month</i> | 32.1 | 15.4 | 26.6 |
| <i>In the next 2 - 11 months</i> | 33.5 | 32.7 | 33.2 |
| <i>In at least 12 months</i> | 8.0 | 13.5 | 9.8 |
| <i>Not sure</i> | 19.8 | 25.0 | 21.5 |
| <i>Not interested in moving</i> | 6.6 | 8.9 | 8.9 |
| Reasons for moving* | | | |
| <i>Financial reasons</i> | 55.8 | 61.8 | 57.6 |
| <i>Paying too much rent</i> | 47.4 | 56.7 | 50.4 |
| <i>Prefer location of HAP apartment</i> | 52.9 | 40.2 | 48.9 |
| <i>To be independent</i> | 51.0 | 43.2 | 48.6 |
| <i>Current home too big/small</i> | 46.9 | 48.3 | 47.4 |
| <i>Personal health</i> | 43.8 | 39.3 | 42.3 |
| <i>Don't like current location</i> | 32.0 | 36.4 | 33.3 |
| <i>Stress/conflict with neighbors/roommates</i> | 30.3 | 26.7 | 29.2 |
| <i>Safety/security reasons</i> | 27.5 | 32.2 | 29.0 |
| <i>Other</i> | 27.4 | 29.5 | 28.0 |
| <i>Current home poor condition</i> | 19.3 | 37.1 | 24.8 |
| <i>Current home not handicapped accessible</i> | 22.4 | 29.9 | 24.7 |
| <i>Current home inadequate HVAC</i> | 22.1 | 26.4 | 23.4 |
| <i>Changes in family</i> | 24.4 | 14.4 | 21.2 |
| <i>Legal reasons</i> | 11.2 | 8.0 | 10.2 |
| Preference for senior housing 55+* | 48.8 | 39.4 | 45.6 |
| Preference for senior housing 55+ w/ services* | 49.5 | 33.3 | 44.1 |
| Willingness to pay for housekeeping M, SD** | N = 102 (3.95, 3.00) | N = 39 (3.23, 2.72) | N = 141 (3.75, 2.93) |
| Willingness to pay for meals M, SD** | N = 103 (4.70, 3.11) | N = 37 (3.57, 2.77) | N = 139 (4.40, 3.06) |

*Percentages based on respondents who said 'Yes' as compared to respondents who reported 'No' (not shown).

**Based on 10-point scale 1 = very unwilling, 10 = very willing

When asked the question, “What is your **main** reason for wanting to move?” (question #7), more than 30% of respondents identified reasons related to finances, including “currently paying too much for rent” (17.3%) and more generally, “financial reasons” (14.8%). Other common answers included size and amenities of their current housing (13.4%). Some examples of responses in this category included “this apartment is too small for three people,” the need for a “bigger place with my own kitchen and bathroom,” and the need for “having room for my caregiver.” Reasons related to housing instability were identified by 6.5% of respondents, including homelessness, comments such as “I’m tired of living from house to house, begging people for a place to stay,” and concern over an upcoming end to a lease. 5.8% of respondents stated that they wanted to move to be independent. Just over 11% noted dissatisfaction with their current living situation due to either disliking the location (5.8%) or due to stress or conflict with current neighbors or roommates (5.4%).

Figure 2. Main Reasons for Wanting to Move



Preference for Age Restricted Housing

Of the 325 persons who answered the question about whether they would prefer to live in an apartment building where only persons age 55 and older live, 45.6% wanted to do so. The desire to move into age restricted housing was not statistically associated with either gender or age. Women were slightly more likely to prefer housing with supportive services, but the finding was not significant. Older persons (including those age 75+, and those age 62+) were no more likely than younger persons to prefer age-restricted housing. However, other variables were associated with this housing preference.

Cross-tabulations for age restricted housing preference and self-rated health indicate that more persons who rate their health as fair/poor want senior housing, though this was not statistically significant. The more objective measure of health, major medical illness in the past 12 months and hospital use in past 12 months, was associated with preference for age restricted housing, again not at a statistically significant level. The variables concerning assistance received with activities of daily living (ADLs, e.g., bathing, dressing) and instrumental activities of aging (IADLs, e.g., shopping, housekeeping) were not associated with senior housing preference. However, for persons who indicated an interest in age restricted housing that provided meals, housekeeping, and other on-site services, more have had a major medical illness or hospital use in the prior 12 months (significant at .05 level). In addition, of those who preferred both age restricted housing and housing with supportive services, more lived alone.

Thus, in this sample of waitlisted persons age 55 and older, more people who were in poor health, and more who lived alone, preferred age restricted housing with services. Most of these respondents indicated that they would not be willing to pay for either housekeeping or meals. On a 10 point scale with 1 being very unwilling, and 10 very willing, 22.8% of respondents selected 6 or higher, indicating they were willing to pay for housekeeping. Slightly more, 29.9% indicated willingness to pay for meals. This finding is important when the questions about food security are considered (see section below on health).

Resident Health Characteristics

The majority of respondents (56.6%) described their health as fair or poor, and nearly half (48.1%) had a major medical illness in the past 12 months, and 47.6% visited the ER. Only 28.8% were hospitalized overnight. The self-rated health item was statistically associated with medical use and hospitalization ($p = .000$).

About 28% of respondents report receiving assistance with one or more instrumental activities of daily living (IADLs) such as shopping, food preparation, household tasks, laundry, and getting to places outside the home (see Table 7). The IADLs they reported needing assistance with, in rank order, were: shopping for food or other items, going to places outside the home, household cleaning/maintenance, laundry, food preparation, using the telephone or computer, and medication management. A very small percentage (10.3%) of persons received assistance with activities of daily living (ADLs) such as bathing, dressing, or grooming. Need for assistance with ADLs and IADLs is associated with moving into a long-term care setting.

Having enough food to eat in the prior 30 days was a concern for 41.5 % of respondents, with 39.5% saying they ate less than they wanted because they did not have enough money. Over one-fifth (22.2%) reported being hungry and not eating in the 30 days prior to completing the survey.

Table 7. Risk Characteristics of Waitlisted Applicants, Age 55+

| | Public Housing N (%) | Section 8 N (%) | Total N (%) |
|--|-------------------------|--------------------|----------------|
| Income < \$10K | 147 (69.3) | 50 (46.3) | 197 (61.6) |
| Homeless in the past 12 months | 53 (24.1) | 10 (9.0) | 63 (19.0) |
| Currently homeless | 19 (8.8) | 5 (4.7) | 24 (7.5) |
| Food insecure | 118 (58.4) | 45 (44.6) | 163 (53.8) |
| Major medical illness in past 12 months | 107 (51.2) | 45 (42.1) | 152 (48.1) |
| Hospitalized overnight in past 12 months | 62 (29.7) | 26 (24.1) | 88 (27.8) |
| Visited the emergency room in past 12 months | 107 (49.3) | 46 (41.8) | 153 (46.8) |
| Without health insurance in the past 12 months | 52 (23.7) | 16 (14.7) | 68 (20.7) |
| Fair/poor health | 129 (58.9) | 56 (51.9) | 185 (56.6) |
| > 75 years of age | 14 (6.4) | 20 (18.3) | 34 (10.4) |
| Living alone | 116 (53.7) | 57 (53.8) | 173 (53.7) |
| Female | 128 (57.9) | 62 (56.9) | 190 (57.6) |

**Percentages based on respondents who met the criterion as compared to other categories within the specific variable.

Highlighted cells indicate items in which differences between the two groups are statistically significant.

Several survey items were grouped based on their association with housing and health risks (Table 7). These include household income under \$10,000 annual, prior homelessness, currently homeless, food insecurity, recent medical illness and/or hospital use, lack of health insurance, fair/poor self rated health, over age 75, living alone, and female. The two groups were similar in terms of living alone and being female, but for several categories, there were differences between applicants for public housing and Section 8 vouchers. More public housing applicants were very poor, currently homeless, homeless in the prior 12 months, reported food insecurity, had a major medical illness, hospitalization, or ER use in the prior 12 months, were without health insurance, and rated their health as fair/poor. Of these differences, only three were statistically significant ($p < .05$). Of those with annual household incomes less than \$10,000, more were on the public housing wait list ($p = .000$). Of those who reported being homeless in

the prior 12 months, more were on the public housing list (p=.001). And of those who reported food insecurity, more were on the public housing list (p=.028). In addition, those who did not have health insurance in the prior 12 months were more likely on the public housing list, a difference that nearly reached significance (p=.061). Only 34 individuals over age 75 were on the waitlist, but of these, more were on the Section 8 list than the public housing list (p<.021).

Table 8. Resources Used by Waitlisted Applicants, 55+

| | Public Housing N (%) | Section 8 N (%) | Total N (%) |
|---|-------------------------|--------------------|----------------|
| Medical insurance | | | |
| <i>Medicare</i> | 36 (16.7) | 28 (25.9) | 64 (19.8) |
| <i>Medicaid</i> | 82 (38.0) | 31 (28.7) | 113 (34.9) |
| <i>Medicare/Medicaid</i> | 22 (10.2) | 20 (18.5) | 42 (13.0) |
| <i>Multiple</i> | 17 (7.9) | 11 (10.2) | 28 (8.6) |
| <i>Other</i> | 40 (18.5) | 12 (11.1) | 52 (16.0) |
| <i>Not sure</i> | 19 (8.8) | 6 (5.6) | 25 (7.7) |
| Food stamps* | 70.9% | 70.4% | 70.7% |
| Assistance with IADLs/ADLs in Past Month** | | | |
| <i>Shop for food or other needed items*</i> | 30.0% | 31.2% | 30.4% |
| <i>Take to places outside of home*</i> | 27.5% | 28.0% | 27.7% |
| <i>Household cleaning/maintenance*</i> | 27.6% | 26.6% | 27.3% |
| <i>Laundry*</i> | 26.0% | 23.6% | 25.2% |
| <i>Prepare food*</i> | 23.9% | 16.7% | 21.5% |
| <i>Computer/telephone*</i> | 21.3% | 20.0% | 20.8% |
| <i>Medication management*</i> | 20.1% | 16.5% | 18.9% |
| <i>Take care of personal finances*</i> | 18.5% | 16.7% | 17.9% |
| <i>Bathing/dressing/grooming*</i> | 10.9% | 9.0% | 10.2% |
| Providers of assistance* | | | |
| <i>Family member</i> | 40.4% | 50.0% | 43.5% |
| <i>No one</i> | 28.3% | 25.5% | 27.3% |
| <i>Friend</i> | 23.8% | 26.4% | 24.6% |
| <i>Paid worker/agency</i> | 14.3% | 11.8% | 13.5% |
| <i>Not applicable</i> | 14.8% | 9.1% | 12.9% |
| <i>Neighbor</i> | 7.2% | 13.6% | 9.3% |
| <i>Other</i> | 4.5% | 4.5% | 4.5% |

*Percentages based on respondents who said 'Yes' as compared to respondents who reported 'No' (not shown).

**IADL = Instrumental Activities of Daily Living, ADL = Activities of Daily Living

In sum, this suggests that public housing applicants differ from Section 8 applicants, with the public housing group scoring worse on some measures of risk and vulnerability.

Supportive Services and Public Benefits

Most respondents had someone available to assist them for a few days if needed, and they reported turning to family (43.5%), friend or neighbor (33.9%), or a paid worker (13.5%), although 25% had no one to help, and about 13% said that they did not need assistance (see Table 8).

Most respondents reported some form of health insurance. Over one-third had Medicaid, 19% Medicare, and 13% reported being dual eligible for both programs. Just over 70% use SNAP, the Supplemental Nutrition Assistance Program.

Study Limitations

Although the survey was mailed to all individuals on the wait list as of August 2011, the respondents do not necessarily represent all persons on the wait list. The survey was available in English only, so individuals who cannot read English or did not have access to an English speaker who could help them, are likely under-represented. Persons who are currently homeless were likely missed, although 24 did report being homeless. Waiting lists were only available for the Section 8 program and Public Housing, therefore the findings may not represent older applicants for Home Forward's affordable properties. In addition, it is possible that the sample is biased toward persons who are more educated, have higher incomes, or some other characteristic that we cannot identify.

Focus Groups with Home Forward Residents

Preference for Age Restricted Housing

When asked whether they would prefer to live in a building with persons age 55 or older, the majority of respondents expressed that they would prefer to live in housing that has many different ages, abilities, and ethnicities. Some of these people clarified that they would like to have a mix of ages but not young children who might be too noisy or “running in the halls.” For example, housing that is restricted to residents 40 years old and older with noise guidelines was mentioned by some. A few respondents stated they would prefer to live in senior only housing.

Impressions of Home Forward

When asked about their impression of Home Forward, residents expressed satisfaction with the following:

- Having an affordable roof over their heads.
- Being able to remain independent. – *“I can also live independently there which is the reason I stay.”*
- Generally a clean and safe environment, though concern over safety issues varied by building.
- Convenient to shopping, public transportation, and hospital, especially in the NW neighborhood.
- Congregate care (though some voiced concerns regarding the future of CHSP).
- Quiet environment.
- *“Thankful to get a wheelchair accessible apartment.”*
- Positive social atmosphere in the building. – Feelings about the social environment varied widely depending on which building residents were living in. From two buildings, some comments about the positive social environment were: *“I like the respect from other residents,” “I like that I know many people by name,”* and *“People do their best to get along here.”*

Residents also discussed improvements they would like to see, such as the following:

Physical building improvements -

- Make all Home Forward buildings wheelchair/handicap accessible. – Some comments included, *“We need a better door in the back to be accessible to wheelchairs,” “People in wheelchairs aren’t getting their fair shake,”* and *“A universal design is already out there, it’s just not implemented. One entrance, one toilet must be handicap accessible, all Home Forward housing should be built this way.”*
- Better indoor air circulation and heating/cooling, particularly in apartments and hallways, especially for those with breathing or other health problems.
- Better management of pests, such as bed bugs and cockroaches.

- *“There is no carpet on our floor. It's a cement floor with tile on it, if you fall it hurts. I think they should really have carpet for seniors because they can break easier than most people.”*
- Better safety and security measures, including emergency response. Comments on this topic included, *“Our TV has been stolen, all of our library books,”* and *“They keep telling us if there is a fire that someone will help us evacuate but they don't. The fire escape isn't designed well. There is no way a person like me with one bum leg could get out”* and *“Security and safety is important. People couldn't get downstairs if there was a fire. I'm on the 8th floor and I wouldn't be able to get down.”*

Management -

- More stable and dependable management. Residents shared the following concerns:
 - *“We have gone through 11 managers, 8 assistant managers over the years. High turnover of staff and we spend a lot of energy getting to know the staff.”*
 - *“The office is closed during normal business hours a lot.”*
 - *“If you call with an emergency they say they can't do anything without a manager.”*
 - *“There is no follow-up from management on safety issues and we used to have a security guard at night but not anymore.”*
- Better relationships between management and residents. Residents shared the following concerns:
 - *“I dislike feeling like I'm being controlled; it's like a boot camp. Management is in and out of our apartments a lot to examine things like the faucets, lights etc. It makes you feel like you are living under suspicion and I have never lived like that before.”*
 - *“Two times our books have been stolen. I have mentioned it to the manager, he said you can come down when the library comes down every month. That's the answers you get.”*

Social environment -

The responses in this category varied widely, depending on the building environment in which residents lived. The following were some of the suggestions respondents offered for improving the social environment within Home Forward buildings.

- Better management of problems, such as drug addiction and prostitution.
- More social activities for residents.

- Foster a positive social environment among residents to promote social engagement, acceptance of diversity, and reduce social isolation. – *“I have lived here I think for 9 years. It was ok for a while and then just recently I have been staying in my apartment because I don’t like being out in the lobby with all the gossip, and listen to them talk about everybody when they shouldn’t be. So I just stay to myself.”* On this topic, another resident commented, *“I dislike the social dynamics. People can’t get beyond the focus on aging and disability and don’t have a life.”* Another respondent stated, *“We have a war going on here and I think it’s because they have nothing to do or a way for us to get out and do anything.”*

Provision of Services to Support Aging in Place

Respondents were asked who should provide services and who they currently go to if they need help. Most said they had access to needed supports in the community, but a few mentioned not qualifying due to age or income. One respondent shared her appreciation for the services offered within her building: *“We have loving nurses here who do blood pressure checks and Tai Chi classes. They will even clip your nails.”* Several respondents expressed that they cannot or do not want to be dependent on family or friends to help. One said, *“Family can complicate a relationship. A professional is not complicated by a personal relationship. Family doesn’t always respect your decision. Service providers know what they are doing and understand your needs.”* Respondents also expressed a need for a service, perhaps within the building, that helps people who have fallen; a service that doesn’t involve calling 911. One respondent suggested *“any number within the building because if you are not doing well and you need medical help, your only choice is 911. Maybe all you need is somebody in between. I fell once and all I needed was someone to get me up.”* For those respondents who have experience with the CHSP, several problems were discussed, including a need for training in problem solving and mediation, and the availability and responsiveness of CHSP staff.

Resident Service Coordinators to Assist with Aging in Place

When asked if they thought resident service coordinators (RSC) could help people age in place, nearly all respondents agreed that RSC’s could be supportive in such a way. Respondents appreciated that resident service coordinators set up activities in the building and often provide emotional support. They also provide referrals for food, clothing, help with utilities, and links to resources. Some residents expressed that they would like to see resident service coordinators develop more rapport with residents, be more interactive, mediate situations, and to listen more closely to residents’ concerns.

Willingness and Ability to Pay for Services

Respondents were asked if they would be willing to pay for services and if so, how much. Some stated that they already pay for food (\$5.50 per day), housekeeping (\$10-\$20 per hour), a housekeeper and a bath aid (\$112 monthly), and transportation to the doctor (\$2). Several others stated that they could not afford to pay for services or to volunteer in exchange for services, however, most said that they would pay for services if they had the money.

Aging in Place for Residents with Cognitive Impairment

When asked if aging in place is a reasonable goal for residents with cognitive impairments, participants were nearly evenly split between yes and no. About half thought that aging in place could be reasonable for people with cognitive impairments if there were adequate supports, such as an on-site nurse and security. Others felt that it would be inappropriate and impractical to have persons with cognitive impairments living in Home Forward housing.

Adding Assisted Living to a Home Forward Building

Participants were given a brief description of a subsidized apartment building in Vermont that converted one entire floor to assisted living with 24-hour staffing and then asked if they thought “*something like that*” would work in a Home Forward building. Most respondents felt that this would be a good idea, as long as it wouldn’t negatively impact current services or feel too institutional. Generally, respondents felt that having assisted living within the building would help those who currently have to leave to go to a higher level of care before they’re ready to leave the community. Respondents felt that it would be necessary in this type of building to have an on-site security guard and a safe, quiet inner city location that is accessible to transportation, grocery stores, and other services.

Adding a Child Care Center to a Home Forward Building

Another question asked participants their attitudes about locating a childcare center on the first floor of a Home Forward apartment building, offering residents the opportunity to volunteer if interested. Most of the respondents were not in favor of this idea. Some were concerned about taking on more responsibility, possible child abuse, or that having children around most of the time would be bad for those with “*bad nerves.*” One respondent simply stated, “*I like the building the way it is without children.*” A few other respondents thought the childcare center would be a great place to volunteer and to meet new people.

Adding a Community Center to a Home Forward Building

Participants were asked if they thought locating a community center on the ground floor of a building was a good idea. All of the respondents were in favor of pairing a community center with their housing in this way. Some of the comments included, “*I like the community center because then you would have a lot of things to do. We would be exposed to other people in the neighborhood rather than just our building,*” and “*a community center would be nice, they provide lunches once in a while. It would be nice to have people come in and join.*”

Home Forward as a Provider of Affordable Senior Housing

Participants had several suggestions for amenities and policies to consider in order to support an ideal aging in place environment. The following were ideas related to the building environment, supportive services, and management policies that residents discussed during the focus groups.

Building-specific ideas:

- Accessibility (i.e., wheelchair accessibility to trash dumpsters, reachable cupboards and shelves, grab bars, lower shower heads, and all building doors.). One resident commented, *“Let’s say as I get older I get more disabled, these apartments are not set up for disabled. The doorways aren’t wide enough, you can barely get through them. I had mine taken down just for my walker. It’s not convenient to get from room to room. I don’t know how you could get a wheelchair in there! It’s not accommodated for getting older.”*
- Carpeting to prevent falls and reduce injuries resulting from falls.
- Conveniently located building close to grocery stores, shopping, health care, and necessary amenities.
- Community center in the building with a swimming pool or access to a swimming pool at a nearby community center.
- Unit specific amenities, including a bathtub, larger kitchen, temperature control in the room, A/C or fan, carpet, energy efficient windows, windows that open easily and close tightly, a personal balcony or access to a patio with a view of greenery, and more storage.
- A community garden on-site.
- A computer room.

Supportive services:

- Quality and nutritious on-site meals three times per day that meet different dietary restrictions. – *“Quality of food is an issue, as well as good nutrition” “I have gluten allergies which makes it hard for me,” and “I have cholesterol problems and I am on a strict diet.”*
- On-site transportation for doctors’ appointments and other needs.
- On-site management, including after-hours. – *“We have no on site manager. We don’t have anybody onsite after office hours.”*
- Security on the weekends.
- Resident services coordinator on-site, for more hours.
- A list of different services that are available in the building and in the community for older adults.
- Nurse to assist with medications and provide support for medical problems.
- Incorporate assisted living on-site.
- Personal assistance with basic needs such as housekeeping, grocery shopping, picking up medications, bath aide, and caregiving in the building. Some comments from residents about personal assistance included: *“Assistance getting groceries, basic human needs. Maybe connect them with a younger volunteer,”* and *“it would be nice to have a social worker in the building or a low level nurse. Have them in the building and maybe give them a discount on rent. Congregate care can only do so much.”*
- Checking in with older adult residents, periodically. - *“When I first moved in here I fell and I laid on the floor for 15 hours yelling at the top of my lungs and nobody came and got me. I know they took the emergency strings out, but I wouldn’t have been able to use it anyway. They usually have them in the bathroom and I fell in*

- *(cont.) the front room. Somebody could have listened for me better, there was a lady across the hall and she was the one who heard me and she went down and told the office,” and another resident suggested, “if someone doesn’t see me or hear me for two days, something put in place so someone can come and check on you. To feel like when I get older that’s safe and available instead of having my caregiver who checks on me and calls me on her day off.”*
- Technological supports. - *“Monitoring people with technology, relatives could connect with Skype, phones, email, computers that are adapted to the individuals’ needs,” and “an alarm bell if you have fallen, like an emergency bell that connects to the police or fire station. We have had several people die and have been discovered by the smell.”*
- Hospice to allow residents to pass away at home.

Social Support:

- Mixed population of residents – various ages and ethnicities, except for young children.
- Maintain residents’ freedom, independence, privacy, and dignity. – *“Wish management would take us seriously.”*
- Social support and activities for residents, such as exercise, gardening, yoga, trips, potlucks, parties, classes. – *“A support group where you get together, more activities to keep you going, regular bingo rather than just tossed around here and there.” “Social activities and gatherings are very good for a senior. I tend to be isolated. Regular scheduled activities, someone who really knows how to do artwork.”*
- Facilitate a system for residents to share their talents and abilities with each other to help meet their needs. *“A time share thing would be nice. If you are good at one thing and another person is good at another thing, you could swap time and helpfulness. I’m a people person and I am good on the phone. I could make appointments to set up transportation or medical rides, that kind of thing. I can be a listener, but anything physical is hard.”*

Policies:

- Allow older adults to have pets.
- Allow residents to paint their walls and decorate their unit more.
- Include utilities in the rent price.
- Limit management visits into apartments for repairs and inspections.

Focus Groups with Community Members (Non-Home Forward Residents)

Four focus group interviews were held with 18 older persons (see Appendix C for participant description). The purpose was to learn about perceptions that older persons have of senior housing in general, Home Forward as a provider of affordable housing and Home Forward as a possible provider of senior housing.

Preference for Age Restricted Housing

When asked whether they would prefer to live in a building with persons age 55 or older, the respondents were evenly divided. Some of those who prefer age restricted housing described it as less noisy, more peaceful, and said that it provided better opportunities for social engagement. *"You have more in common with them. And I just enjoy being around people that are considered seniors"* said one woman. Among those who preferred mixed ages, a 57-year old woman explained, *"If you do have a few 80 year-olds and 60 year-olds, and you find someone that is 50 living in there, there's a possibility they can help the older person. Don't just bunch all old people together because one can't help the other most of the time."* This person also explained that older persons are more vulnerable to crime, and that younger neighbors could possibly deter crime. A 55-year old male said, *"You can learn a lot from older people."* Thus, benefits to mixed age housing could be found by both younger and older residents.

Impressions of Home Forward

When asked about their impression of Home Forward, most remarks were positive, though some also had negative things to say. In addition, it was clear that some respondents either did not have familiarity with Home Forward, or confused it with other housing providers and even other agencies, including Northwest Pilot Project and Aging and Disability Services. Among the positive perceptions were statements that Home Forward is a safety net for those who lose their jobs or have no place to live. Slightly mixed statements included impressions that there are barriers, especially for seniors.

A group of African American participants spoke about the importance of extended family, and the inability to have either grown children or grandchildren live with them for periods of time as needed. If they needed personal care assistance due to illness or injury, they would prefer to receive help from a family member who could live with them in the apartment. One African American woman said, *"I don't want to go to a facility. I want to be in my own place. And I have family members that I think would come in and help me. I would prefer that. I would have to be real bad off before I would consider going and living in a nursing home."* Another commented, *"...why block out families that can help each other as far as for going in, like when you're sick? I don't want anyone living with me. I want to be on my own and self-sufficient, but if the need comes and I fall sick, and possibly it could be a kid of yours that falls sick and you don't want to leave your place to go to take care of them. You prefer they come to your place for a short length of time, you know. I just feel like it's not enough choice when dealing with government housing."*

Some felt that families get an unfair advantage because they have young children, and that older adults with grown children should be considered families as well. Among the negative perceptions were those who associated Home Forward properties with crime and/or with persons who have substance abuse or mental health conditions. A man who attends a senior center said, *"I'm familiar with Hollywood East but wouldn't live there. Its location is wonderful. It's on the 77 bus stop stops right out the door. And all the things that are convenient. But I see the people that come down and I'm not attracted to them. And these people come from a welfare background and on welfare all their life. That kind of person doesn't interest me. I have nothing to share with them."* Another man said his impressions were *"not very flattering. They're one of uncleanliness, squalor, a tremendous amount of noise, unkempt premises, uncleanliness, trash."* One woman described reading a newspaper article about crime in the New Columbia area; she explained that *"I've seen some of that stuff in the northeast area there on the other side of Killingsworth and stuff. And I don't think it's safe for even seniors to be around there. Because I always feel those younger people, if we're carrying a purse, they could very well run up and grab it. And I have a fear of that."* A person with more mixed perceptions said, *"I went over to the Night Out thing [at Hollywood East]. And the physical building to me seemed to be pretty good. It was no frills, you know, but I didn't really see anything terribly wrong. I thought it was fairly well kept up."* However, a man who lives in a subsidized apartment building not owned by Home Forward said, *"I don't see some of the things that people are talking about here. I would say in our building there are a couple people that all of us agree are kind of undesirable. Like they're drunk all the time or whatever. But other than that, they're just really fantastic people."* He went on to explain that building management is important, and that the management of his building does not respond to resident concerns such as mold on window sills.

Home Forward as a Provider of Affordable Senior Housing

When asked what amenities would be important to older residents of Home Forward housing, participants had the following suggestions:

Building-specific ideas:

- Provide all appliances in units; provide free/convenient laundry facilities; dishwasher
- Make building handicap accessible
- facility operated transportation
- 24-hour security
- Accessible stairwells
- Storage

Supportive services:

- Staff available to check on residents, especially those with dementia
- Housekeeping services
- Provide nursing care
- Recreational opportunities based on resident input

Policies:

- Rules about proper behavior
- Train managers to ensure they are qualified and accountable
- Affordable utilities
- Allow residents to serve on Board

Adding Assisted Living to a Home Forward Building

Participants were given a brief description of a subsidized apartment building in Vermont that converted one entire floor to assisted living with 24-hour staffing and then asked if they thought “something like that” would work in a Home Forward building. All of the participants agreed this was a good strategy. For example, some spoke of the importance of staying close to familiar places and people: *“The people that are on the other floors could come and visit them and cheer them up and make them feel as if they're still wanted and loved.”* Others commented on needs that older people have: *“People that live alone or are with busy children could use that. As we get older we get weaker and there's no one to help.”* A couple of African American women saw possibilities for family involvement, with family living in the standard apartment in the same building where their parent was in an assisted living unit. One participant remarked that adding assisted living would save public monies because there would be reduced transition-related costs.

Adding a Child Care Center to a Home Forward Building

Another question asked participants their thoughts about locating a childcare center on the first floor of a Home Forward apartment building, offering residents the opportunity to volunteer if interested. The responses across the groups were divided, with about half in favor and half opposed. Those who liked the idea stated that the opportunity to interact with children outweighed the possible negatives, such as noise. Those who were opposed felt that noise would be the largest problem associated with a child care center.

Adding a Community Center to a Home Forward Building

Participants were asked if they thought locating a community center on the ground floor of a building was a good idea, and most agreed that it was. Some thought it would help maintain connections with the local neighborhood, another thought it would be a good place for meals, exercise, and art classes. The opportunity to mix with people of different ages was noted, with one African American woman stating, *“Usually in a center like that you might have ping pong tables or whatever activities and the elderly person can sit in with younger people and just enjoy. Just as the young people would be helping the elderly, you would be helping young people because some don't have a grandmother or mother or father or grandfather to even talk to. So that's another win-win situation.”* The opportunity to meet with like-minded people and to have thoughtful, educated conversations about the state of the world was mentioned by an elderly man. A couple of participants expressed preference for a senior center rather than a general community center, and others expressed concern that a community center would introduce crime to the building.

Market Study

Executive Summary

Market Analysis Summary: Demand for Affordable Housing, Persons Age 55+

A market analysis of low-income households age 55 and older was conducted based on four targeted areas in the Portland metropolitan area (see Appendix E for full report). The four areas, selected with input from Home Forward's Aging in Place Workgroup, include: Downtown (zip codes 97201, 204, 205, 209), New Columbia (zip codes 97203, 217), Lloyd Center (zip codes 97212, 227, 232), and Gresham (97030, 236). The study uses household as the unit of analysis, and it includes an estimate of persons who would be least likely to need an institutional care setting (referred to as "health-eligible" in the tables available in the Appendix). The study calculated availability of affordable units on existing properties that serve persons age 55 and older. It cannot account for occupancy rates within these buildings, nor can it account for the number of older persons who reside in affordable properties not designated for seniors (e.g., single room occupancy hotels, other apartments).

Downtown

Approximately 62% of households age 55 and older in the Downtown market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 50% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 37% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 and older is 60% are under 30-percent of AMI, 21% are between 30 and 50-percent of AMI, with the remaining 19% between 50 and 80-percent of AMI. Based upon these preliminary reviews it appears that there are currently an adequate number of affordable units within the downtown market area with units available to serve nearly 70% of 62 years of age and older households.

New Columbia

Approximately 55% of households age 55 and older in the New Columbia market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 34% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 17% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 and older is 31% are under 30-percent of AMI, 31% are between 30 and 50-percent of AMI, with the remaining 38% between 50 and 80-percent of AMI. Based upon these preliminary reviews it appears that there is a viable market for additional affordable units within the New Columbia area, as current units serve less than 10% of eligible 62 years of age and older households in this market.

Lloyd District

Approximately 45% of households age 55 and older in the Lloyd Center market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 29% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 16% of households were shown to

have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 and older is 36% are under 30-percent of AMI, 28% are between 30 and 50-percent of AMI, with the remaining 36% between 50 and 80-percent of AMI. Based upon these preliminary reviews it appears that there may be a viable market for additional affordable units within the Lloyd Center market area. Current units available can serve approximately 26% of 62 years of age and older households.

Gresham

Approximately 45% of households age 55 and older in the Gresham market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 28% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 14% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 years of age and older is 31% are under 30-percent of AMI, 30% are between 30 and 50-percent of AMI, with the remaining 39% between 50 and 80-percent of AMI. Based upon these preliminary reviews it appears that there may be demand for additional affordable units within the Gresham market area. Current units available can serve approximately 17% of 62 years of age and older households.

In sum, of the four market areas, only Downtown was found to have an adequate number of affordable units. In rank order, the areas with the highest demand include New Columbia (less than 10% served), Gresham (17% currently served), and Lloyd District (25% currently served).

Availability of Licensed Community-Based Care Settings

Information about two types of licensed settings, assisted living and residential care (AL/RC) facilities, is provided because some residents of subsidized housing ultimately move to either one of these setting types, or to an adult care home or nursing facility. The Home Forward workgroup expressed interest in progressive care – something more than that provided by the Congregate Housing Service Program but not as much care as a licensed nursing facility. Further, there is precedence for assisted living in public and other subsidized housing. Examples include the Helen Sawyer Plaza, described in *Best Practice Models for Aging in Place*, the assisted living conversion program and Connecticut’s regulation of assisted living as a service in public housing (See Appendix F and *System Level Initiatives that Promote Aging in Place*).

Regulations

Oregon’s Seniors and Persons with Disabilities licenses and regulates assisted living and residential care (AL/RC) facilities under Oregon Administrative Rules 411.54, available at http://www.dhs.state.or.us/policy/spd/rules/411_054.pdf. These settings require 24-hour staffing with persons trained to assist residents with personal care, administer medications, and monitor changes in health conditions. Licensed nurses provide resident

assessment and staff training and oversight, but facilities are not required to staff nurses on a full-time basis, nor are they required to have medical directors. Newly constructed AL units must be built as apartments with kitchen, bathroom, storage, living and sleeping areas. RC facilities do not require full apartments. Settings may be designated for dementia care with additional regulatory requirements. AL/RC settings may be certified to receive Medicaid payments on behalf of eligible residents. Oregon’s Medicaid income threshold and the medical eligibility, determined by an assessment of the individual’s need for assistance with mobility, eating, toileting and cognitive or behavioral concerns. This assessment establishes whether the client requires nursing home level of care. Once qualified, there are several service levels, each with a different reimbursement rate (e.g., residents who have higher care needs warrant a higher rate).

Availability of Affordable AL/RC

In Oregon, these settings are largely private pay, with 61% of AL/RCS paid for privately, 2% with long-term care insurance, and 5% other sources (e.g., family). About one-third of AL/RC residents are on Medicaid (OHP, 2009). In general, fees are charged on a monthly basis and include two broad categories: services and housing. Medicaid reimburses AL/RC providers for the services, but not the housing component. The current Medicaid reimbursement rate depends on an assessment of the resident’s needs and ranges from \$1002 to \$2355 per month for AL. Oregon limits the amount that can be charged for room and board for Medicaid beneficiaries; currently the rate is \$523.70 which is usually paid by the federal SSI payment for residents who qualify for that program. Thus, an AL provider would receive \$2878.70 per month for a resident assessed in the highest care category. [Source for reimbursement rates: <http://www.oregon.gov/DHS/spd/provtools/rateschedule.pdf>]

The state, through the Oregon Housing and Community Services Department, has influenced the supply of AL/RC through the provision of loans under the Elderly and Disabled Loan Program available to developers. As of 2004, this program financed 46 AL and 3 RC projects, totaling 2,182 units, with \$118 million dollars (Hernandez, 2007).

Table 9. Availability of AL/RC in Multnomah County, Over Time

| Year | Licensed units/beds | Occupied units/beds | Units/beds w/ Medicaid client | Total Occupancy % | Medicaid % | Statewide Medicaid % |
|-------|---------------------|---------------------|-------------------------------|-------------------|------------|----------------------|
| 2011 | 3720 | 3136 | 1146 | 84.0 | 36.5 | 38.5 |
| 2010 | 3792 | 3250 | 1132 | 86.0 | 34.8 | 37.6 |
| 2009 | 3700 | 2958 | 1062 | 79.9 | 35.9 | 37.6 |
| 2007* | 3250 | 2889 | 895 | 88.9 | 31.0 | 33.0 |
| 2006 | 3292 | 2820 | 952 | 85.7 | 33.8 | 34.5 |
| 2005 | 3266 | 2755 | 827 | 84.4 | 30.0 | 35.5 |

*2008 figures not available. Abstracted from <http://www.oregon.gov/DHS/spd/data/#spd-providers>

AL/RC settings are not required to either accept new Medicaid clients or retain current residents who “spend down” to the Medicaid level. Over time, some AL/RC providers have opted out of the Medicaid program, citing low reimbursement rates. However, the AL/RC market is affected by the general housing market and the overall economy, and so the availability of Medicaid units has fluctuated over time. One consistent trend is that fewer AL/RC providers in urban areas, as compared to rural communities, accept Medicaid. Table 9 shows the availability of AL/RC settings in Multnomah county since 2005; on average, just over one-third of units are occupied by Medicaid clients.

A review of AL/RC settings in the four regions used for the market study of affordable housing for older persons found that the availability of Medicaid units varies widely as shown in Table # below. Downtown Portland has the largest capacity, due to two large settings, one of which is located in an old building in need of repairs. Should either of these buildings close, the demand for affordable AL would increase markedly. Both the neighborhood adjacent to New Columbia and Gresham have AL/RC settings that accept Medicaid clients. A couple of facilities in North Portland have about 60% of residents on Medicaid; the county average of 36.5% was used to estimate capacity in Gresham. Lloyd District currently does not have any AL/RC settings that accept Medicaid.

Table 10. Total & Estimated Medicaid Capacity in AL/RC in Four Market Study Areas

| Location | Total capacity | Estimated Medicaid capacity |
|----------------|----------------|-----------------------------|
| Downtown | 198 | 121 |
| New Columbia | 167 | 100 |
| Lloyd District | 118 | 0 |
| Gresham | 391 | 143 |
| Total | 874 | 364 |

Characteristics of AL/RC Settings and Residents

As of 2006, there were 201 AL (13,519 beds) and 230 RC (8,685 beds) facilities in Oregon. The capacity ranged from 7 to 186, with most settings having fewer than 100. Most residents move from home or an independent living facility (40%). Aging in place is a goal for many settings; most residents (46%) die at the setting, though 16% move to a nursing facility. The majority of residents are female and over age 85 years of age. People move into AL/RC settings because they need assistance with daily activities, managing health conditions, and/or cognitive decline. A review of resident acuity in settings not designated as memory care found that about 38% had a dementia diagnosis, 30% were incontinent, nearly 20% were unable to transfer without help from another person, 10% needed assistance to eat, 5% were on hospice, and 15% have a diagnosis of diabetes (OHPR, 2009).

Recommendations

Recommendations

Current residents are aging, and there will be increased affordable housing demand among older persons in the community. By default, Home Forward is and will continue to be a provider of senior housing.

Building-Specific Strategies

Adaptations to the built environment can increase safety, security, independence and improve the overall quality of life for aging individuals.

- During building remodels and on-going maintenance, implement designs and other amenities that create a less institutional and more home-like environment
- In existing buildings, install hallway handrails, sitting areas on the way to common areas, visual way-finding cues, and accessible knobs, keys, tubs, and showers. Make certain that all exit doors, including those that lead to garbage and recycling areas, are handicapped accessible
- Seek out a possible group discount arrangement for *Lifeline* or similar emergency response systems
- Conduct a safety audit of the interior and exterior physical environment to evaluate the suitability of existing buildings for the physically frail and cognitively impaired
- Identify whether the building has suitable space for service provision, e.g., on-site staff, visiting staff, service vehicles
- Evaluate the adequacy of the physical infrastructure, such as plumbing, electrical systems, and technology

For additional recommendations refer to *Best Practices in Built Environments for Aging in Place*.

Social Environment

Social isolation can complicate illness, leading to increased disability and death.

- Continue to work with community partners that can provide regularly scheduled, on-going, and appropriate on-site and off-site social and recreational activities
- Provide support to property managers to coordinate and subsidize the costs of on-site social and recreational activities

- Create a system for welcoming new residents and helping them to integrate into the housing community
- Promote a social environment that embraces cross cultural differences among residents (e.g. culturally relevant programming) and addresses misunderstandings and social conflicts (e.g. community building, mediation and cross cultural educational programming)

Supportive Services

“The first step for any housing authority is to assess the health and functional status of its tenants.” (Milbank, p.8, 2006).

Increase Home Forward’s ability to respond adequately to the supportive service needs of older adults by adopting the following suggestions:

- Continue to work with local agencies such as the county Health Department and Aging and Disability Services (ADS) in order to profile the characteristics of current residents age 55+, their service use and service gaps
- Track move-outs to determine reasons older residents leave and where they go. Develop an organizational policy to guide decisions about appropriate placement of older residents who need to move into another Home Forward apartment or to a higher level of care, such as adult foster, assisted living, or a nursing facility
- Work with ADS, academic institutions, and other identified partners to develop training and informational resources that will prepare Home Forward staff to identify at-risk residents, provide them with needed support, and link them to existing services
- Work with ADS, Social Security Administration, and local health care providers to assist residents in evaluating their existing insurance and benefits coverage and provide a way for these residents to enroll in appropriate plans or programs
- Locate new housing in an asset-rich neighborhood, with easy access to public transportation, groceries, health care, and supportive services
- Work with the Healthy Aging Coalition of Multnomah County to promote health, including diabetes screening, smoking cessation, physical activity, falls reduction, and cognitive enhancement programs
- Work with local academic institutions to map neighborhood assets such as clinical, nutritional, recreational, and social service resources adjacent to existing and proposed affordable housing, and share asset maps with housing operators and community partners

- Identify and evaluate the feasibility of constructing senior housing in partnership with organizations that have senior housing development and operating expertise
- Expand the service coordinator program, calculate the probable return on investment for investing in resident services, and educate service coordinators on aspects of normal aging and the aging services network
- Explore the benefits of renting out commercial space for needed resident services (e.g., home health, PACE)

Create new partnerships between Home Forward and other government and not-for-profit organizations that provide benefits or services to older residents

- Build relationships with nonprofit and faith-based organizations (Oregon Alliance of Senior & Health Services, NWPM, Sinai Family Services), as well as government agencies (e.g., State Medicaid Office), to identify resources and services that could be more effectively directed to residents
- Explore the possibility of utilizing Section 8 vouchers within existing senior housing developments that offer a range of on-site services and/or assisted living facilities (to be attractive to other property owners, it may be necessary to consider higher Section 8 subsidies)

Expand formal partnerships between Home Forward and tenant leadership to set common health-related goals and shared responsibilities for improving the well-being of all residents.

- Work with tenant leadership to identify the feasibility of organizing and training resident volunteers to assist older residents with supportive services, such as home visits, escorting during errands, scheduling doctors' appointments, and similar tasks
- Assist tenant associations with accessing health promotion, preventive health, and disease management programs for all residents. Train tenant leaders to identify and access information about resources available to older adults in their communities

Identify resources (e.g., foundations, donors) with designated senior-related programming as a priority, and develop fundraising strategies

- Build relationships with foundations with an interest in the well-being of older adults to support programming for Home Forward residents

- Establish partnerships with medical insurance plans that are most active within Home Forward developments and ask them to commit to funding preventive health programs within select developments
- Collaborate with City partners to identify resources to strengthen existing services at all senior centers located near Home Forward properties
- Collaborate with academic institutions to identify effective prevention and disease management strategies to improve the quality of life of older Home Forward residents (Adapted from Parton, et al., 2010)

System-Level Strategies

Partner with state housing and health and social service agencies to explore the possibility of:

- Creating/expanding a state tax credit or bond program to fund resident services as well as affordable housing
- Developing health-related and supportive services “savings accounts” where pretax contributions of housing providers and residents could accumulate over time (Adapted from Harahan, Sanders, & Stone, 2006)
- Developing mixed-income properties where the costs of services for lower-income residents are cross-subsidized by wealthier ones
- Developing partnerships between housing communities and health care providers that can support resident access to primary care and chronic care management and increase referrals to cooperating providers (Adapted from Leading Age Center for Applied Research, 2011)

For examples of system level strategies in other regions, refer to *System Level Initiatives that Promote Aging in Place*.

Potential Local and National Partners

Oregon

Erinn Kelley-Siel, Director, Oregon Department of Human Services <http://www.oregon.gov/DHS/>

Oregon Housing and Community Services <http://www.ohcs.oregon.gov/>

Oregon Alliance of Senior and Health Services <http://www.oashs.org/>

Jay Yedziniak, Addictions and Mental Health Division, Medicaid Policy Manager, 503-945-6231

Michael R. DeShane & Mauro Hernandez, Concepts in Community Living, 503-255-4647
<http://www.ccliving.com>

David Fuks, Cedar Sinai Park, 503-535-4393, <http://cedarsinaipark.org/>

Sharon Nielson, The Nielson Group, 503-296-7796, www.thenielsongroup.net

Elaine Young, Manager, State Unit on Aging, Department of Human Services, Seniors and People with Disabilities, 503-373-1726

Diana Norton, Manager, Assisted Living licensing, Seniors and People with Disabilities, 503-945-6405

National

Terri Sult or David Nolan, CHI Partners, Healthcare and housing consultants, Oakland, CA
<http://www.chipartners.net/>

Candace Baldwin, Senior Policy Advisor, Community Solutions Group, LLC at NCB Capital Impact, Arlington, VA (703) 647-2352 <http://ncbcapitalimpact.org>

Robyn Stone, PhD, Leading Age (formerly the American Association of Homes and Services for the Aging), Washington, DC <http://leadingage.org/>

Nancy Eldridge, Cathedral Square Corporation, Burlington, VT <http://www.cathedralsquare.org/about.php>

Other national partners might be identified through the participants in the Aging in Place Summit co-sponsored by Leading Age. See report, <http://www.leadingage.org/Article.aspx?id=1799>

Appendix

Appendix A - Research Methods

Focus Group Interviews

Focus group interviews are a common method of collecting information about individuals' personal experiences and opinions. Eight focus group interviews, attended by a total of 43 participants, were conducted during August and September 2011. Four of the groups were comprised of current Home Forward residents, and the other four included a general population of Multnomah County. Susan Eliot, MPH, of Eliot & Associates, a Portland-based qualitative research consultant, assisted with the sample recruitment, data collection, and analysis. For demographic information about focus group participants, refer to Appendix C. The research budget and timeline allowed for translation services at only one focus group interview; future research should seek input from immigrants and other non-English speakers.

Home Forward Participants

The four groups recruited from Home Forward public housing sites included individuals who were: over age 55, a current resident of public housing, and willing to participate. Some residents were CHSP clients. Each interview was held at one of four public housing sites (transportation was provided from other sites) and 25 public housing residents participated. The focus of these interviews was on the meaning of "aging in place" to older residents. For the specific questions asked of Home Forward residents, refer to Appendix C.

Community Participants (Non-Home Forward Residents)

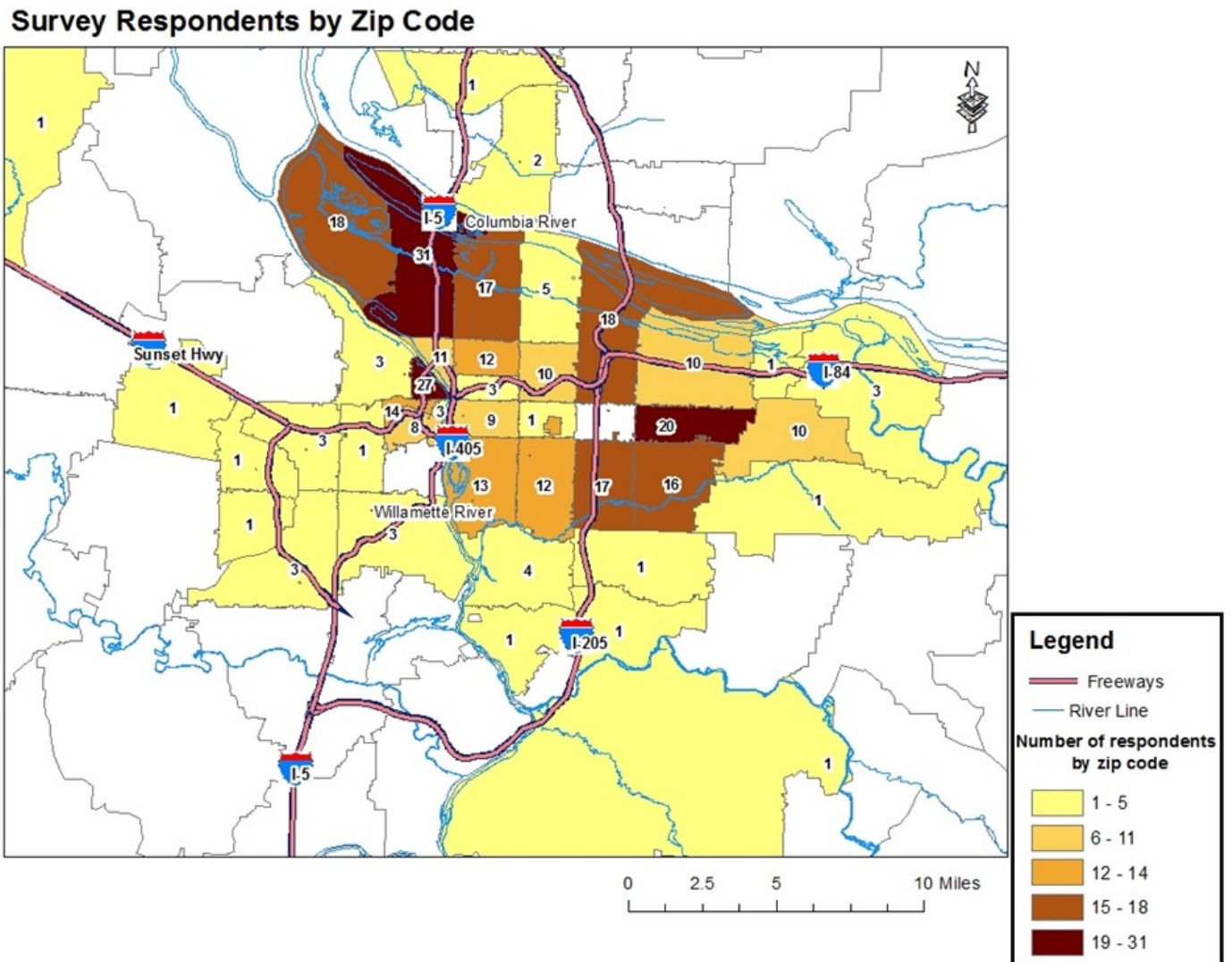
The other four groups were recruited from the broader community in order to assess attitudes about Home Forward among low-income older persons. 18 individuals were recruited from two subsidized housing properties not owned by Home Forward (one in outer southeast Portland, one downtown), from a senior center in Northeast Portland, and from a community health clinic. The goal was to identify persons age 55 or older with low incomes who either lived in affordable housing or used community-based health and social services and who represented a range of Portland neighborhoods. For the specific questions asked of Non-Home Forward participants, refer to Appendix C. All participants received lunch or snacks and a ten dollar stipend and all signed a consent form approved by Portland State University's Human Subjects Research Review Committee. They also completed a one-page demographic survey.

Survey of Home Forward Waitlisted Applicants

In order to assess the status of current waitlisted applicants age 55 and older, a mailed survey was conducted in August, 2011. Home Forward provided a list of all individuals on the wait list for public housing, a Section 8 voucher, or both on DATE. A total of 1,331 letters were mailed on August 4, 2011. The cover letter, from Dr. Paula Carder at PSU's Institute on Aging, explained that the purpose of the survey was research, that responses would be kept confidential, and that five surveys returned before August 26, 2011 would be eligible for a random drawing to receive a ten dollar gift card. The envelope included a 6-page survey and a stamped return envelope addressed to PSU.

Of the 1,331 letters mailed, 53 were found to be duplicates, reducing the total sample to 1278. Of these, 150 were non-deliverable, reducing the total possible sample to 1,128. In total, 345 surveys were received and the response rate, based on the total possible sample, was 30.5%. The following map illustrates where survey respondents were located, within the Portland Metro region.

Figure 3. Location of Waitlist Survey Respondents



Data Analysis

The survey data were first entered in an ACCESS database and a 10% sample was checked for data entry errors. SPSS was used to analyze the survey data; specific analytic steps included measures of central tendency (mean, median, range, standard deviation) reported in frequency tables, and measures of group differences (cross tabulations, CHI square).

Appendix B - Site Visits to Local Senior Housing Developments

AiP Housing Site Visits

Summer 2011



Station Place Tower

Address: 1020 NW 9th Ave

Neighborhood: Pearl District

Owner/Operator: REACH CDC

Total Units: 176 (76 subsidized)

About: Studios, 1 and 2-
bedrooms; LIHTC property (76
units at 30%; 81 at 50% and 19 at 80%);
residents are 55+.



Appendix B - Site Visits to Local Senior Housing Developments

Station Place Tower



Computer Lab

Exercise Room



Station Place Tower



Supply Room

Appendix B - Site Visits to Local Senior Housing Developments

Station Place Tower



Interior Hallway

Lobby



Station Place Tower



Storage for Residents

Library



Appendix B - Site Visits to Local Senior Housing Developments

Station Place Tower

Room Divider



Community Room



Community Kitchen

Station Place Tower



RSC's Office – 2nd Floor

Appendix B - Site Visits to Local Senior Housing Developments

Station Place Tower



Rooftop Garden



Outdoor/Patio Areas



Station Place Tower

Noteworthy Features:

- Laundry: top & front loading washers and dryers, key fob on door
- 2-tone paint & handrails in hallways
- Community phone
- Food pantry
- Emergency response protocol
- Large maintenance room
- Rooftop community garden
- Wheelchairs, dollies for check-out

Challenges:

- Wi-Fi and tech support
- Vending machines
- Trash collection: chute, door to trash room, compactor

Appendix B - Site Visits to Local Senior Housing Developments

Heights at Columbia Knoll

Address: 8320 NE Sandy Blvd

Neighborhood: Madison South

Owner/Operator: Legacy Senior Living/Shelter Resources, Inc.

Total Units: 208

About: LIHTC property (60% MFI); considered independent living w/ services; single occupant's yearly income = or <\$30,060



Heights at Columbia Knoll



Dining Room

Library



Appendix B - Site Visits to Local Senior Housing Developments

Heights at Columbia Knoll



Hallways:

- Hand-railings
- Well lit
- Spaces for personalization or creating a home-like environment

Heights at Columbia Knoll



Model 1-bedroom unit

Appendix B - Site Visits to Local Senior Housing Developments

Heights at Columbia Knoll



Kitchen

Heights at Columbia Knoll



Wheelchair accessible bathroom

Appendix B - Site Visits to Local Senior Housing Developments

Heights at Columbia Knoll

Noteworthy Features:

- Income limits, but residents can have assets
- Don't do Medicare or Medicaid billing
- All units are wheelchair accessible
- Concierge until 9pm
- Some intergenerational programming (weekly story hour & art classes)
- Care and concern forms
- Modified system for resident falls (no sirens or fire trucks)
- Town Halls for residents to give feedback

Challenges:

- Retaining the right mix of service packages/payment plans
- Turning prospective residents down because they just barely have too much income
- Waiting list for 1-bedrooms w/ views

Irvington Village

Address: 420 NE Mason St.

Neighborhood: Madison South

Owner/Operator:

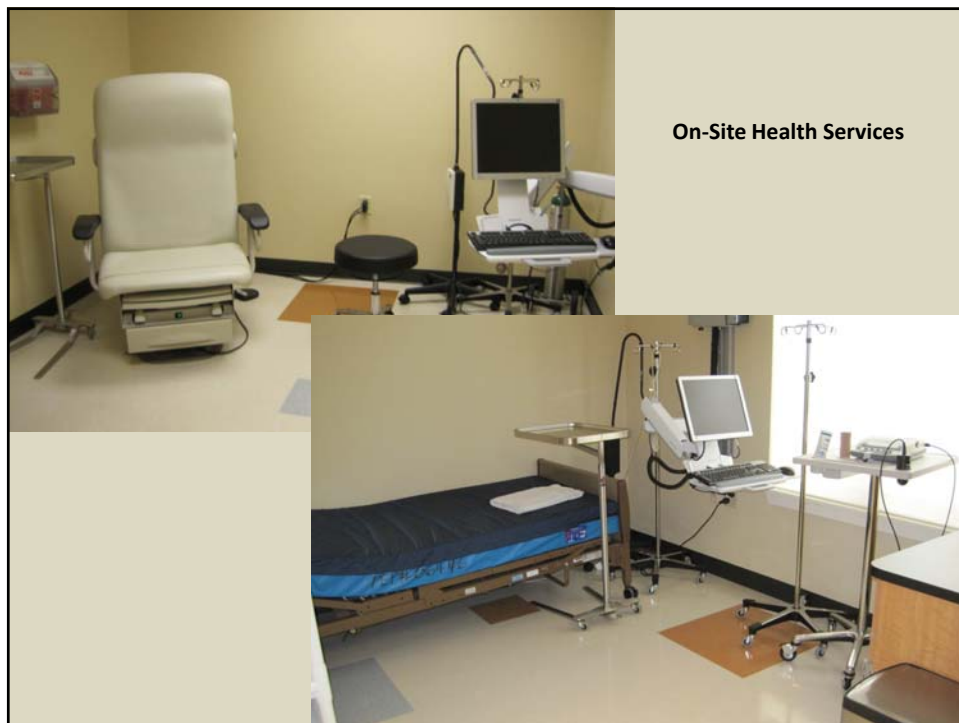
Providence ElderPlace

Total Units: 104

About: LIHTC property; Use the PACE model; residents Must be nursing home and Medicaid eligible; licensed assisted living



Appendix B - Site Visits to Local Senior Housing Developments



Appendix B - Site Visits to Local Senior Housing Developments

Irvington Village

On-site rehabilitation



Irvington Village

Accessible
bathrooms



Appendix B - Site Visits to Local Senior Housing Developments

Irvington Village



Minimalist Kitchen



Irvington Village

Noteworthy Features:

- Residents get up to 3 wellness checks/day
- Interdisciplinary team meets daily and works collaboratively
- Security on weekend nights
- PACE doesn't maintain a waitlist
- Looking to expand in-home health services offered
- Social events with neighborhood churches

Challenges:

- Move-outs for non-PACE residents are difficult
- Used to have issues with people entering the building, but not so much anymore

Appendix B - Site Visits to Local Senior Housing Developments

Maybelle Clark MacDonald Center

Address: 605 NW Couch St

Neighborhood: Old Town

Owner/Operator: Legacy
manages AL

Total Units: 54

About: LIHTC prop;
licensed AL; all units
are studios

Rent: \$523/mo



Appendix B - Site Visits to Local Senior Housing Developments



Appendix B - Site Visits to Local Senior Housing Developments

Maybelle Clark MacDonald Center



Nurses Station

Whirlpool tub



Maybelle Clark MacDonald Center

Noteworthy Features:

- F/T nurse on-site
- Low staff turnover
- All residents are Medicaid eligible
- Close coordination with neighboring service providers
- Free WiFi
- Strong partnerships with local universities
- Negotiated Risk Agreements
- Staff visit residents up to 3 times each day

Challenges:

- Overnight guests pay \$50/night
- 34 F/T staff
- Bed bugs
- Limited office space for staff
- Neighborly issues like loud music

Appendix B - Site Visits to Local Senior Housing Developments

The Taft Home

Address: 1337 SW Washington St.

Neighborhood: Downtown

Owner/Operator: REACH CDC/Concepts in
Community Living

Total Units: 75 studios

About: Formerly SROs;
now operated as
licensed residential;
shared bathrooms for
most units



The Taft Home



Appendix B - Site Visits to Local Senior Housing Developments

The Taft Home



Sinks in units



Elevator and hallway

Appendix B - Site Visits to Local Senior Housing Developments

The Taft Home



Bathrooms



Dining Room

Appendix B - Site Visits to Local Senior Housing Developments

The Taft Home

Noteworthy Features:

- Older, historical building
- Clothing closet on each floor
- Furnished units
- Smoking room
- Licensed residential care
- Housing of last resort
- 3 meals a day
- 15 mental health beds
- 30 F/T staff

Challenges:

- Elevator is too small
- Smoking
- Bed bugs
- High resident turnover

Appendix C - Focus Group Interview Guides and Participant Demographics

Home Forward residents age 55+ with low to moderate income

| QUESTIONS | PROMPTS |
|--|---|
| <p>Let's start by going around the table and having each person tell how long you have lived in [BUILDING(S)] and how well you like it.</p> | |
| <p>Now let's imagine that you are living in a building that you really like and you would like to live in for the rest of your life—some people have told us they “want to be carried out feet first.” Researchers and building owners call that “aging in place.” What does that mean to you—to “age in place?”</p> | <ul style="list-style-type: none"> • It might help to think of a resident you know who lived in their apartment until the end of their life. What did it take for that to happen? |
| <p>In order to be able to “age in place” we know that people sometimes need to have their home modified to meet their needs and/or services to help them with daily activities like getting food, taking care of their home, and managing a disability or illness. Let me give you a few examples of what others have mentioned to us so you can see what I mean. Then I'd like to hear what changes you think might be needed.</p> <p>Example A: We know that some changes would need to be made to the building to enable people to age in place. One resident of a subsidized apartment told us there is a double door on her building, each with a separate lock, making it a real struggle to get in the front door with her groceries. Another resident said that he is not able to reach the top of his dumpster from his wheelchair to empty his trash or get to the bus stop over the cracks in the sidewalk. Tell us what would need to change about your building to allow people to age in place?</p> <p>Example B: Some people's mental abilities start to deteriorate as they age. For example, one property manager told us a story about a resident who is having a difficult time remembering to take her medications. Tell us what services property managers should provide to individuals like these who want to age in place.</p> | <ul style="list-style-type: none"> • Building: lighting, support bars, kitchen layout, air conditioning, laundry, elevator, security doors/windows, pets, housekeeping, meals, etc. • Should the first floor of the building have a community center? On-site child care? Volunteer activities? • Cognitive: remembering to take care of one's basic needs, being able to continue driving a car, understanding the bus schedule/system, overall memory loss (dementia) • Is aging in place a reasonable goal for someone with memory problems? |

(Continued)

| | |
|---|---|
| <p>Example C: Residents have told us they want to grow old in an environment where they feel safe and can easily get to the store and bus stop. They want to be independent as long as they can and so they want to have important services close by. What would the ideal “aging in place” environment look like for you?</p> | <ul style="list-style-type: none"> • Environment: crime, noise, public transportation, proximity to doctor’s office, other seniors, food |
| <p>Now let’s talk about how those services you mentioned would be provided. One building manager said, “I get asked to do everything. It’s the littlest things to a resident who says, ‘I can’t breathe, can you call 911?’” If you needed assistance to be able to stay in your apartment for as long as possible, who would you want to call?</p> | <ul style="list-style-type: none"> • Family? Friends? Other residents? • Any time? Just a few days? • It might help to think about the last time you needed a little help, like if you were sick or needed to access a new service |
| <p>Some buildings have resident service coordinators available. Do you think that a service coordinator could help residents to age in place for as long as possible? Why/not? What more could the service coordinator do to meet this goal?</p> | <p>Bring existing community services to the building? Get specialized training in aging services?</p> |
| <p>What if services were available in your building, either from an outside agency or from HAP - would you be willing/able to pay for some of the services you might need as you age? Would you be willing to volunteer to help other residents?</p> | <p>Examples:</p> <ul style="list-style-type: none"> • Housekeeping? • Meals? • A trip to the store or doctor’s office? • A weekly nurse visit? • Medication set-up? |
| <p>Some people prefer to live in senior housing, and others prefer to live with people of all ages. What about you – would you be interested in a HAP building that was designated for people aged 62 and older? Why/not?</p> | |
| <p>Is there anything we haven’t talked about today that you think I should know about providing services that allow individuals who live in subsidized housing to age in place, i.e. in their own home, if they desire?</p> | |

Table 11. Characteristics of Home Forward Residents who Participated in Focus Groups

| Characteristics of Home Forward Focus Group Participants | |
|---|-----------|
| N=25 | |
| | N (%) |
| Age | |
| ≤ 61 years | 8 (32.0) |
| ≥ 62 years | 17 (68.0) |
| Age, mean | 66.5 |
| Sex | |
| Female | 19 (76.0) |
| Marital status | |
| Single | 16 (64.0) |
| Married/partnered | 0 (-) |
| Separated/divorced | 7 (28.0) |
| Widowed | 1 (4.0) |
| Race | |
| White/Caucasian | 19 (76.0) |
| Black/African American | 1 (4.0) |
| American Indian/Alaska Native | 2 (8.0) |
| Asian; Native Hawaiian/Pacific Islander | 0 (-) |
| Multiracial | 3 (12.0) |
| Hispanic/Latino* | 1 (4.0) |
| U.S. Born | 24 (96.0) |
| Primary language spoken | |
| English | 25 (100) |
| Highest level education | |
| Some high school or less | 4 (16.0) |
| High school diploma/GED | 6 (24.0) |
| Some college | 10 (40.0) |
| Four-year college degree or higher | 5 (20.0) |
| Employment status, N=20 | |
| > 32 hours/week | 0 (-) |
| < 32 hours/week | 1 (3.5) |
| Not employed/not looking for work | 16 (80.0) |
| Not employed/currently seeking work | 1 (3.5) |
| Prefer not to answer | 2 (10.0) |
| Household income, N=23 | |
| < 10,000 | 15 (65.2) |
| 10,000-14,999 | 7 (30.4) |
| 15,000-19,999 | 1 (4.3) |

Portland residents age 55+ with low to moderate income (non-residents of Home Forward)

| QUESTIONS | PROMPTS |
|--|--|
| 1. Let's start by going around the table and having each person tell how long you have lived in Portland and how well you like it. | |
| 2. When you think about the best places for low-income seniors to live in Portland, what comes to mind? | Any specific buildings, companies, or neighborhoods? |
| 3. Some of you might be familiar with public or low-income housing, where people pay rent based on their income. <ul style="list-style-type: none"> • What are some of your impressions of low-income housing? • What about your impressions of the Housing Authority of Portland, specifically, what do you think about HAP as an operator of low-income housing? | Do you know anyone who lives in a HAP property? Examples include Hollywood East, Dahlke Manor, Northwest Tower, Holgate House, New Columbia |
| 4. Some people prefer to live in senior housing, and others prefer to live with people of all ages. What about you – what are your thoughts about living in a place designated as senior housing? | |
| 5. What do you think HAP would need to do to be a good operator of senior housing? <ul style="list-style-type: none"> • If HAP operated senior housing, what would they need to do to make it attractive to you? • Would you recommend a HAP building to a friend or family member who was looking for affordable senior housing? | What kinds of on-site services would be most attractive to you? (social activities, meals, housekeeping, transportation) What about the building itself – what would make it appealing to you? (security, handicapped accessibility, storage, community center, computer access) |
| 6. In Vermont, there is a low-income apartment building where they modified one whole floor to be assisted living. They had trained staff to help the assisted living residents, and a wellness center anyone could access. What do you think about something like that being available here in Portland? | What are the possible pros and cons of having assisted living within a larger apartment building? |
| 7. Some people say there isn't enough for people to do in senior housing. In Boston, MA, there is a senior housing building with a child care center on the first floor where the residents can volunteer to do activities with the children, and another building has a neighborhood community center on the first floor. What do you think about something like that here in Portland? | Think about the possible pros and cons |
| 8. Is there anything we haven't talk about today that you think I should know about low-income senior housing? | |

Table 12.
Characteristics of
Community
Members who
Participated in
Focus Groups

Characteristics of Community Focus Group Participants
(Non-Home Forward Residents)

| N=18 | N (%) |
|---|-----------|
| Age | |
| ≤ 61 years | 5 (27.8) |
| ≥ 62 years | 13 (72.2) |
| Age, mean | 70.6 |
| Sex | |
| Female | 11 (57.9) |
| Marital status | |
| Single | 3 (15.8) |
| Married/partnered | 5 (27.8) |
| Separated/divorced | 5 (27.8) |
| Widowed | 5 (27.8) |
| Race | |
| White/Caucasian | 11 (57.9) |
| Black/African American | 4 (22.2) |
| American Indian/Alaska Native | 0 (–) |
| Asian; Native Hawaiian/Pacific Islander | 3 (16.7) |
| Multiracial | 0 (–) |
| Hispanic/Latino* | 0 (–) |
| U.S. Born | 10 (55.6) |
| Primary language spoken | |
| English | 12 (66.7) |
| Russian | 4 (22.2) |
| Farsi | 2 (11.1) |
| Highest level education (N=17) | |
| Some high school or less | 3 (17.6) |
| High school diploma/GED | 3 (17.6) |
| Some college | 4 (23.5) |
| Four-year college degree or higher | 7 (41.2) |
| Employment status | |
| > 32 hours/week | 0 (–) |
| < 32 hours/week | 2 (11.1) |
| Not employed/not looking for work | 9 (50.0) |
| Not employed/currently seeking work | 3 (15.8) |
| Prefer not to answer | 4 (22.2) |
| Household income | |
| < 10,000 | 12 (66.7) |
| 10,000-14,999 | 2 (11.1) |
| 15,000-19,999 | 1 (5.6) |
| 30,000-34,999 | 2 (11.1) |
| 50,000+ | 1 (5.6) |

Appendix D - Mailed Survey to Section 8 and PH Waiting Lists (55+)



Thank you for taking the time to answer the following questions

1. Are you currently:
 - ₀ Living alone
 - ₁ Living with others → How many live in your household (not including you)? ____ person(s)
 - ₂ Homeless (skip to #4)

2. How long have you lived in your current home?
 - ₀ Less than 12 months
 - ₁ 12 months to 5 years
 - ₂ More than 5 years
 - ₃ Not sure

3. Do you have a lease for your current home?
 - ₀ No lease
 - ₁ Month-to-month
 - ₂ 6 months
 - ₃ 12 months
 - ₄ More than 12 months
 - ₅ Not sure

4. Are you currently on the waitlist for any apartments **not** owned/operated by the Housing Authority of Portland (now known as Home Forward)?
 - ₀ No
 - ₁ Yes
 - ₂ Not sure

5. How would you describe your current wish to move?
 - ₀ I am no longer interested in moving → Please skip to Question 8, next page.
 - ₁ I'd like to move in the next month
 - ₂ I'd like to move in the next 2-11 months
 - ₃ I'd like to move at least 12 months (or one year) from now
 - ₄ I'm not sure when I would move

6. What are your reasons for wanting to move?

Please check either **Yes** or **No** for each reason that applies to you.

| | No | Yes |
|--|---------------------------------------|---------------------------------------|
| a. Current home is either too big or too small | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| b. Current home is in poor condition | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| c. Current home has inadequate heating/cooling system | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| d. Current home is not handicapped accessible | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| e. Currently paying too much for rent | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| f. Stress or conflict with current neighbors/roommates | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| g. Changes in your family | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| h. Prefer location of Housing Authority apartment | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| i. Don't like location of current home | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| j. Financial reasons | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| k. Legal reasons | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| l. Safety/security reasons | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| m. Personal health | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| n. To be independent | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| o. Other reason (specify): _____ | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |

7. What is your **main** reason for wanting to move?

8. Would you prefer to live in an apartment building where only people age 55 and over live?

- ₀ No
₁ Yes

9. If the Housing Authority had an apartment building for people age 55 and older, and meals, housekeeping, or other on-site services were available, would you want to live there?

- ₀ No → If no, please go to Question 12.
₁ Yes

10. How willing would you be to pay for housekeeping? (Please circle a number)

| | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|----|--------------|
| Very unwilling | | | | | | | | | | Very willing |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |

11. How willing would you be to pay for meals? (Please circle a number)

| | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|----|--------------|
| Very unwilling | | | | | | | | | | Very willing |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |

12. In the past month, have you been given assistance from an agency or another person to:

| | No | Yes |
|--|---------------------------------------|---------------------------------------|
| a. Shop for food or other needed items? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| b. Prepare food? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| c. Take care of personal finances? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| d. Take you to places outside your home? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| e. Take care of household tasks like cleaning and maintenance? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| f. Take medications? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| g. Use a computer or telephone? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| h. Do laundry? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| i. Help with bathing, dressing, and grooming? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |

13. Is there a friend, relative, or neighbor who could assist you for a few days if necessary?

- ₀ No
- ₁ Yes

14. Who usually helps you (if you need) help getting food, medications, or other important necessities? Please check all that apply.

- ₀ Family member (including a spouse or partner)
- ₁ Friend
- ₂ Neighbor
- ₃ Paid worker/agency
- ₄ Other person
- ₅ No one
- ₆ Not applicable

15. In general, would you say your health is:

- ₁ Excellent
- ₂ Very good
- ₃ Good
- ₄ Fair
- ₅ Poor

16. In the past 12 months, have you:

| | No | Yes |
|---------------------------------|---------------------------------------|---------------------------------------|
| a. Had a major medical illness? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| b. Been hospitalized overnight? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| c. Visited the emergency room? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |

17. What type of medical insurance do you currently have?

- ₀ Medicaid (a program for persons who have low income or are disabled; *Oregon Health Plan*)
- ₁ Medicare (a program for persons over age 65)
- ₂ Other (specify): _____
- ₃ Not sure

18. Were you without health insurance at any time in the last 12 months?

- ₀ No
- ₁ Yes

Please remember that your answers are completely confidential. Thank you for taking the time to complete these questions.

19. In what year were you born? 19 __ __

20. Were you:

- ₁ Born in the U.S.
- ₂ Born outside the U.S.

21. Are you:

- ₁ Male
- ₂ Female

22. Do you consider yourself either Hispanic or Latino/a?

- ₀ No, not Hispanic or Latino/a
- ₁ Yes, Hispanic or Latino/a

23. Do you consider yourself: (Please check just **one** box.)

- ₁ White or Caucasian
- ₂ Black or African American
- ₃ American Indian or Alaska Native
- ₄ Asian
- ₅ Native Hawaiian or Other Pacific Islander
- ₆ Multiracial
- ₇ Other (specify): _____

24. What language are you most comfortable speaking? (Please check just one box.)

- | | |
|--|--|
| <input type="checkbox"/> ₁ English | <input type="checkbox"/> ₆ Filipino |
| <input type="checkbox"/> ₂ Russian | <input type="checkbox"/> ₇ Japanese |
| <input type="checkbox"/> ₃ Spanish | <input type="checkbox"/> ₈ Korean |
| <input type="checkbox"/> ₄ Vietnamese | <input type="checkbox"/> ₉ Other (specify): _____ |
| <input type="checkbox"/> ₅ Chinese | |

25. What is the highest level of education that you have completed? (Please check just one box.)

- | | |
|--|--|
| <input type="checkbox"/> ₁ Some high school or less | <input type="checkbox"/> ₅ Associate degree |
| <input type="checkbox"/> ₂ High school diploma or GED | <input type="checkbox"/> ₆ Four-year college degree or more |
| <input type="checkbox"/> ₃ Some college | <input type="checkbox"/> ₇ Other (specify): _____ |
| <input type="checkbox"/> ₄ Trade/vocational school | |

26. Are you currently:

- ₁ Single
- ₂ Married/partnered
- ₃ Separated/divorced
- ₄ Widowed

27. Do you currently have adult children?

- ₀ No
- ₁ Yes → If yes, how many adult children live in the Portland area? _____ children

28. In the past 30 days, have you:

| | No | Yes |
|---|---------------------------------------|---------------------------------------|
| a. Been concerned about having enough food to eat? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| b. Eaten less than you felt you should because there wasn't enough money to buy food? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |
| c. Ever been hungry but didn't eat because you weren't able to get out for food? | <input type="checkbox"/> ₀ | <input type="checkbox"/> ₁ |

29. Do you currently receive SNAP, the Supplemental Nutrition Assistance Program, benefits (food stamps)?

- ₀ No
- ₁ Yes

30. Have you been homeless for any time in the past 12 months?

- ₀ No
₁ Yes

31. Do you think that you may become homeless in the future?

- ₀ No
₁ Yes
₂ Not sure

32. How much do you currently pay per month for rent? If you pay nothing, please enter zero.

\$_____ per month

33. Is your current employment status:

- ₁ Employed at least 32 hours per week
₂ Employed less than 32 hours per week
₃ Not employed and not looking for work
₄ Not employed, but currently looking for work
₅ Prefer not to answer

34. What is your annual household income? (Please check just **one box**.)

- | | |
|--|--|
| <input type="checkbox"/> ₁ Less than \$10,000 | <input type="checkbox"/> ₆ \$30,000 to \$34,999 |
| <input type="checkbox"/> ₂ \$10,000 to \$14,999 | <input type="checkbox"/> ₇ \$35,000 to \$39,999 |
| <input type="checkbox"/> ₃ \$15,000 to \$19,999 | <input type="checkbox"/> ₈ \$40,000 to \$44,999 |
| <input type="checkbox"/> ₄ \$20,000 to \$24,999 | <input type="checkbox"/> ₉ \$45,000 to \$49,999 |
| <input type="checkbox"/> ₅ \$25,000 to \$29,999 | <input type="checkbox"/> ₁₀ \$50,000 or more |

35. What is the zip code where you currently live? _____

Thank you for taking the time to help us by answering these questions! Please remember that your answers will not be shared with HAP and will not affect any services you may receive now and in the future. If your name is drawn for a \$10 gift card, you will be notified by mail.

Please mail back your answers in the stamped, addressed envelope provided or to:

Institute on Aging
Portland State University
P.O. Box 751
Portland, OR 97207-0751



Appendix E - Senior Housing Market Analysis

MARKET ANALYSIS FOR AFFORDABLE SENIOR HOUSING IN MULTNOMAH COUNTY



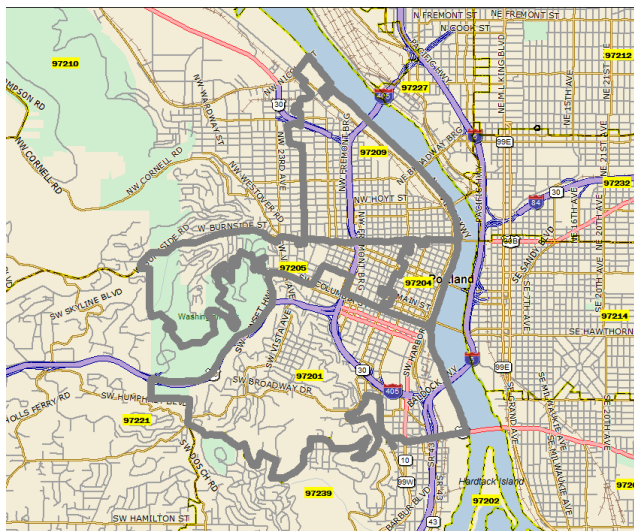
PREPARED FOR: PAULA CARDER, PHD.

The information to follow serves to provide a demographic analysis of current market conditions for additional affordable senior housing in various neighborhoods of Multnomah County, Oregon. These analyses are studies that examine the age and health eligible population within four separately defined market areas and referred to as Downtown, New Columbia, Lloyd Center, and Gresham. Criteria applied included households age 55 and over with reported incomes of 30-percent, 50-percent, and 80-percent of the area median income. Existing housing stock, considered affordable and exclusive to serving independent older adults age 55 and older is referenced briefly in discussion. A variety of sources were used to obtain data on existing housing to include HUD, OHCSO, and provider websites, as well as lists provided by the client. It should be noted that housing data has not been verified nor further reviewed.

Market Areas

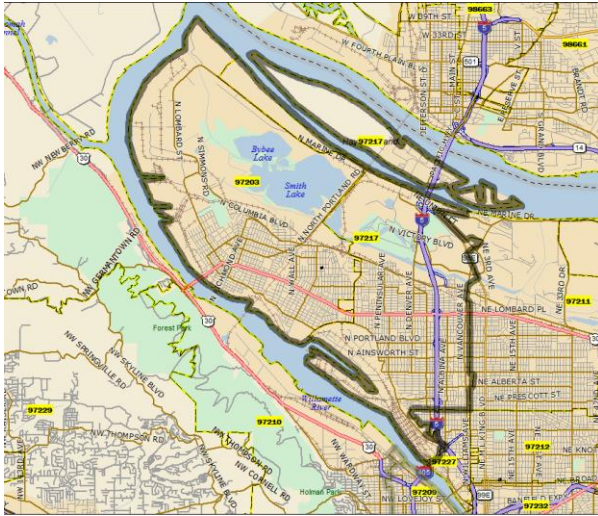
Four separately defined primary market areas were selected, which include Downtown, consisting of four zip codes, New Columbia, consisting of two zip codes, Lloyd Center, consisting of three zip codes, and Gresham, which consists of a 3-mile radius around the city center. The PMAs chosen are conservative estimates of the areas from which most of the facility's residents will come.

Downtown



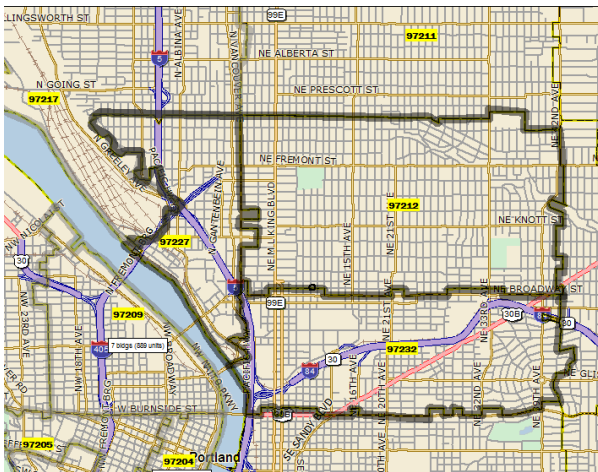
The primary market area selected for this preliminary analysis is comprised of zip codes 97201, 97204, 97205, and 97209, as illustrated.

New Columbia



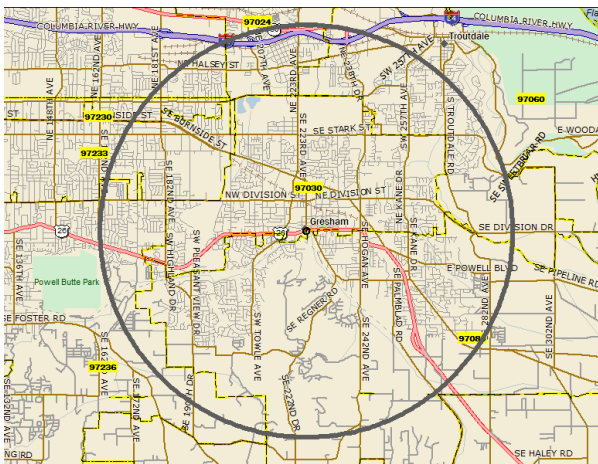
The primary market area selected for this preliminary analysis is comprised of zip codes 97203 and 97217, as illustrated.

Lloyd Center



The primary market area selected for this preliminary analysis is comprised of zip codes 97212, 97227, and 97232, as illustrated.

Gresham



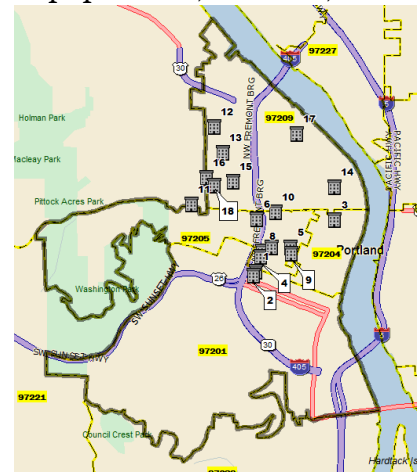
The primary market area selected for this preliminary analysis is comprised of a 3-mile radius around the city's center, as illustrated.

Area Competitors

Affordable buildings, which exclusively served the 55 years of age and older population, were located in all PMAs reviewed. The majority of all buildings (83%) were however listed as serving households age 62 years of age or older. Income requirements for residency varied between buildings and ranged from 30 to 80 percent of the area median income. Actual rent amounts charged at such buildings may be individually calculated and assessed at 30-percent of the unit occupant's income or pre-set at 30-percent of the unit's set-aside, whereas Section 8 vouchers will generally be available to offset the difference for occupants.

Downtown

Within the Downtown PMA there were found to be a total of 18 affordable buildings with a total of 1,956 units that targeted the 62 years of age and older population; of these, there appeared to be just one building (118 units) that had the reduced age requirement of 55 years of age and older. Income limits for residency at the properties ranged from 30 to 80-percent of area median income. Just a little over half of all available units (51%) served only households with reported incomes at or below the very low income threshold of 50-percent of AMI.

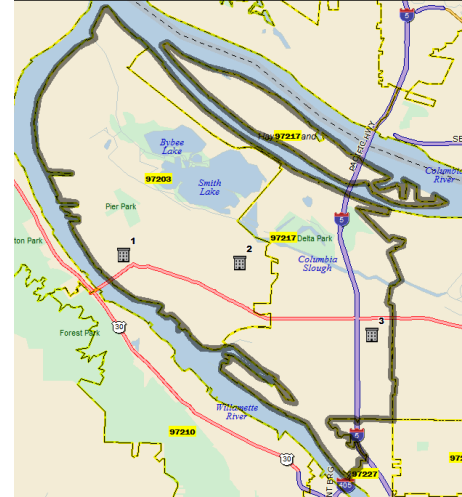


| <u>zip code</u> | <u>Project</u> | <u>pop served</u> | <u>set-asides</u> | <u>units</u> |
|-----------------|----------------------------|-------------------|-------------------|--------------|
| 97201 | Rose Schnitzer Tower (1) | 62+ | 60% | 233 |
| | Twelfth Avenue Terrace (2) | 55+ | 50% | 118 |
| 97204 | 333 Oak Apartments (3) | 62+ | 50% | 90 |
| 97205 | 1200 Building (4) | 62+ | 50% | 89 |
| | Admiral Apartments (5) | 62+ | 60% | 14 |
| | Bronaugh Apartments (6) | 62+ | 80% | 23 |
| | Chaucer Court (7) | 62+ | 80% | 51 |
| | Chaucer Court (7) | 62+ | 60% | 83 |
| | Lexington Apartments (8) | 62+ | 40% | 54 |
| | Park Tower Apartments (9) | 62+ | 50% | 164 |
| | Rosenbaum Plaza (10) | 62+ | 80% | 76 |
| | Uptown Tower (11) | 62+ | 60% | 72 |
| 97209 | Marshall Union Manor (12) | 62+ | 50-80% | 242 |
| | Medallion Apartments (13) | 62+ | 80% | 90 |
| | Musolf Manor (14) | 62+ | 30% | 83 |
| | Musolf Manor (14) | 62+ | 60% | 11 |
| | Northwest Towers (15) | 62+ | 80% | 150 |
| | Roselyn Apartments (16) | 62+ | 60% | 30 |
| | Roselyn Apartments (16) | 62+ | 80% | 1 |
| | Roselyn Apartments (16) | 62+ | 30% | 76 |
| | Roselyn Apartments (16) | 62+ | 50% | 81 |
| | Station Place Towers (17) | 62+ | 80% | 19 |
| | Williams Plaza (18) | 62+ | 80% | 106 |

New Columbia

Within the New Columbia PMA there were a total of three affordable buildings located with a total of 221 units that targeted the 62 years of age and older population; of these, there appeared to be two buildings (99 units) that had the reduced age requirement of 55 years of age and older. Income limits for residency at the properties ranged from 40 to 80-percent of area median income. Just a little under half of all available units (47%) served households with reported incomes at or below 50-percent of area median income.

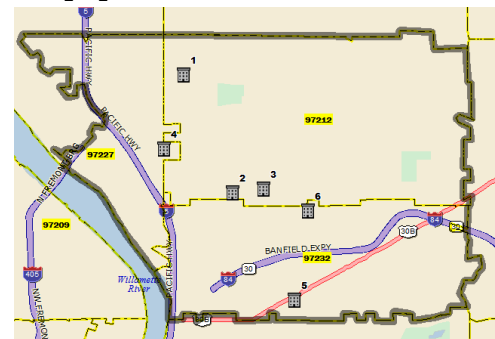
| <u>zip code</u> | <u>Project</u> | <u>pop served</u> | <u>set- asides</u> | <u>units</u> |
|-----------------|-----------------------------|-------------------|--------------------|--------------|
| 97203 | Schrunk Riverview Tower (1) | | 80% | 118 |
| | | | 50% | 4 |
| | Trenton Terrace (2) | 62+ | 60% | 61 |
| 97217 | Rosemont Court (3) | | 30% | 16 |
| | | | 40% | 37 |
| | | 55+ | 50% | 46 |



Lloyd Center

Within the Lloyd Center PMA there were a total of six affordable buildings located with a total of 425 units that targeted the 62 years of age and older population; of these, there were two buildings (115 units) that had the reduced age requirement of 55 years of age and older. Income limits for residency at the properties ranged from 30 to 80-percent of area median income with approximately 32-percent of all available units serving those households at or below 50% of the AMI.

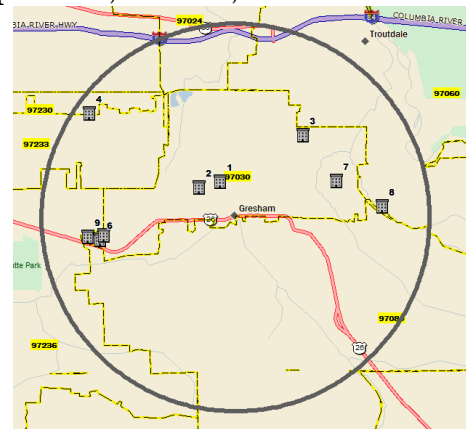
| <u>zip code</u> | <u>Project</u> | <u>pop served</u> | <u>set- asides</u> | <u>units</u> |
|-----------------|------------------------------|-------------------|--------------------|--------------|
| 97212 | Allen Freemont Plaza (1) | 55+ | 50% | 9 |
| | | | 60% | 55 |
| | Dahlke Manor (2) | 62+ | 80% | 115 |
| 97227 | Unthank Plaza Apartments (4) | | 80% | 95 |
| | | 62+ | 80% | 80 |
| 97232 | Silvercrest Residence (5) | | 80% | 80 |
| | | | 50% | 75 |
| | | 62+ | 30% | 5 |
| | Wiedler Commons (6) | 55+ | 50% | 46 |



Gresham

Within the Gresham PMA there were a total of nine affordable buildings found with a total of 769 units that targeted the 62 years of age and older population; of these, there were listed just three buildings (182 units) that had units available to a reduced age requirement of 55 years of age and older. Income limits for residency at the properties ranged from 30 to 80-percent of area median income with approximately 23-percent of all available units serving those households at or below 50% of the AMI.

| <u>zip code</u> | <u>Project</u> | <u>pop served</u> | <u>set- asides</u> | <u>units</u> |
|-----------------|-----------------------------|-------------------|--------------------|--------------|
| 97030 | East Fair Terrace (1) | 62+ | 60% | 100 |
| | Gresham Station (2) | 55+ | 50% | 5 |
| | Mattie Younkin Manor (3) | 62+ | 60% | 248 |
| | Mayfield Court (4) | 62+ | 30% | 30 |
| | Powell Vista Manor (5) | 55+ | 50% | 30 |
| | Villa North Apartments (6) | 62+ | 30% | 71 |
| | Fairlawn Good Samaritan (7) | 62+ | 60% | 32 |
| | Fairlawn Good Samaritan (7) | 55+ | 80% | 119 |
| 97236 | Columbia Terrace (8) | 62+ | 50% | 61 |
| | Powell Plaza I & II (9) | 62+ | 60% | 67 |



FINDINGS

Downtown

Approximately 62% of households age 55 and older in the Downtown market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 50% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 37% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 years of age and older is 60% that are under 30-percent of AMI, 21% that are between 30 and 50-percent of AMI, while the remaining 19% are between 50 and 80-percent of AMI.

Based upon these preliminary reviews it appears that there are currently an adequate number of affordable units within the downtown market area with units available to serve nearly 68% of 62 years of age and older households.

New Columbia

Approximately 55% of households age 55 and older in the New Columbia market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 34% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 17% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low

income households age 55 years of age and older is 31% that are under 30-percent of AMI, 31% that are between 30 and 50-percent of AMI, while the remaining 38% are between 50 and 80-percent of AMI.

Based upon these preliminary reviews it appears that there is a viable market for additional affordable units within the New Columbia area, as current units available serve less than 10% of eligible 62 years of age and older households in this market.

Lloyd Center

Approximately 45% of households age 55 and older in the Lloyd Center market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 29% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 16% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 years of age and older is 36% that are under 30-percent of AMI, 28% that are between 30 and 50-percent of AMI, while the remaining 36% are between 50 and 80-percent of AMI.

Based upon these preliminary reviews it appears that there may be a viable market for additional affordable units within the Lloyd Center market area. Current units available can serve approximately 26% of 62 years of age and older households

Gresham

Approximately 45% of households age 55 and older in the Gresham market could be considered as low income, having reported annual incomes of 80-percent or below of area median income; 28% of age 55 and older households would fall under the very low income category with 50-percent or below AMI, and 14% of households were shown to have reported annual incomes at 30-percent or below of the AMI. The distribution of low income households age 55 years of age and older is 31% that are under 30-percent of AMI, 30% that are between 30 and 50-percent of AMI, while the remaining 39% are between 50 and 80-percent of AMI.

Based upon these preliminary reviews it appears that there may be demand for additional affordable units within the Gresham market area. Current units available can serve approximately 17% of 62 years of age and older households.

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
DOWNTOWN – ZIP CODES 97201, 97204, 97205, 97209
55+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,045 | 39,382 |
| Total 55-64 Population | 5,361 | 6,171 |
| Total 65-74 Population | 2,794 | 3,809 |
| Total 75-84 Population | 1,507 | 1,755 |
| Total 85+ Population | 846 | 942 |
| Total 55-64 Households | 3,818 | 4,413 |
| Total 65-74 Households | 2,112 | 2,900 |
| Total 75-84 Households | 1,183 | 1,395 |
| Total 85+ Households | 691 | 776 |
| *Income Eligible Households: | | |
| Total 55-64 | 2,158 | 2,487 |
| Total 65-74 | 1,425 | 1,964 |
| Total 75-84 | 754 | 875 |
| Total 85+ | 488 | 552 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 2,028 | 2,337 |
| Total 65-74 | 1,340 | 1,846 |
| Total 75-84 | 565 | 656 |
| Total 85+ | 366 | 414 |
| Total Income & Health Eligible Households | 4,300 | 5,253 |
| Current Available Units | 1,956 | 1,956 |
| Total Market Potential Remaining | 2,344 | 3,297 |

**below 40K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
DOWNTOWN – ZIP CODES 97201, 97204, 97205, 97209
55+ HOUSEHOLDS @ 50% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,045 | 39,382 |
| Total 55-64 Population | 5,361 | 6,171 |
| Total 65-74 Population | 2,794 | 3,809 |
| Total 75-84 Population | 1,507 | 1,755 |
| Total 85+ Population | 846 | 942 |
| Total 55-64 Households | 3,818 | 4,413 |
| Total 65-74 Households | 2,112 | 2,900 |
| Total 75-84 Households | 1,183 | 1,395 |
| Total 85+ Households | 691 | 776 |
| *Income Eligible Households: | | |
| Total 55-64 | 1,744 | 2,012 |
| Total 65-74 | 1,167 | 1,565 |
| Total 75-84 | 607 | 706 |
| Total 85+ | 394 | 447 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 1,639 | 1,891 |
| Total 65-74 | 1,097 | 1,471 |
| Total 75-84 | 455 | 530 |
| Total 85+ | 296 | 335 |
| Total Income & Health Eligible Households | 3,487 | 4,227 |
| **Current Available Units | 1,956 | 1,956 |
| Total Market Potential Remaining | 1,531 | 2,271 |

**below 25K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
 DOWNTOWN – ZIP CODES 97201, 97204, 97205, 97209
 55+ HOUSEHOLDS @ 30% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,045 | 39,382 |
| Total 55-64 Population | 5,361 | 6,171 |
| Total 65-74 Population | 2,794 | 3,809 |
| Total 75-84 Population | 1,507 | 1,755 |
| Total 85+ Population | 846 | 942 |
| Total 55-64 Households | 3,818 | 4,413 |
| Total 65-74 Households | 2,112 | 2,900 |
| Total 75-84 Households | 1,183 | 1,395 |
| Total 85+ Households | 691 | 776 |
| *Income Eligible Households: | | |
| Total 55-64 | 1,376 | 1,561 |
| Total 65-74 | 844 | 1,118 |
| Total 75-84 | 425 | 480 |
| Total 85+ | 274 | 309 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 1,293 | 1,467 |
| Total 65-74 | 793 | 1,051 |
| Total 75-84 | 319 | 360 |
| Total 85+ | 206 | 232 |
| Total Income & Health Eligible Households | 2,611 | 3,110 |
| **Current Available Units | 1,956 | 1,956 |
| Total Market Potential Remaining | 655 | 1,154 |

**below 15K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
 DOWNTOWN – ZIP CODES 97201, 97204, 97205, 97209
 62+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,045 | 39,382 |
| Total 62-64 Population | 1,608 | 1,851 |
| Total 65-74 Population | 2,794 | 3,809 |
| Total 75+ Population | 2,353 | 2,697 |
| Total 62-64 Households | 1,145 | 1,324 |
| Total 65-74 Households | 2,112 | 2,900 |
| Total 75+ Households | 1,874 | 2,171 |
| *Income Eligible Households: | | |
| Total 62-64 | 647 | 746 |
| Total 65-74 | 1,425 | 1,964 |
| Total 75+ | 1,242 | 1,427 |
| Income & Health Eligible Households: | | |
| Total 62-64 | 609 | 701 |
| Total 65-74 | 1,340 | 1,846 |
| Total 75+ | 931 | 1,070 |
| Total Income & Health Eligible Households | 2,880 | 3,617 |
| Current Available Units | 1,956 | 1,956 |
| Total Market Potential Remaining | 924 | 1,661 |
| Household Capture Necessary | 67.9% | 54.1% |

* below 40K

DOWNTOWN – ZIP CODES 97201, 97204, 97205, 97209

| | 2000 | 2011 (est.) | 2016 (proj.) |
|---------------------------------------|--------|-------------|--------------|
| Total Population | 28,959 | 37,045 | 39,382 |
| Total 55-64 Population | 2,611 | 5,361 | 6,171 |
| Total 65-74 Population | 1,722 | 2,794 | 3,809 |
| Total 75+ Population | 1,811 | 2,353 | 2,697 |
| 55-64 Population as Percent of Whole | 9.02% | 14.47% | 15.67% |
| 65-74 Population as Percent of Whole | 5.95% | 7.54% | 9.67% |
| 75+ Population as Percent of Whole | 6.25% | 6.35% | 6.85% |
| Total Households | 17,908 | 23,760 | 25,684 |
| Total 55-64 Households | 1,877 | 3,818 | 4,413 |
| Total 65-74 Households | 1,378 | 2,112 | 2,900 |
| Total 75+ Households | 1,486 | 1,874 | 2,171 |
| 55-64 Households as Percent of Whole | 10.48% | 16.07% | 17.18% |
| 65-74 Households as Percent of Whole | 7.69% | 8.89% | 11.29% |
| 75+ Households as Percent of Whole | 8.30% | 7.89% | 8.45% |
| 30% and below AMI HH 55-64 | | 1,376 | |
| 30% and below AMI HH 65-74 | | 844 | |
| 30% and below AMI HH 75+ | | 699 | |
| 50% and below AMI HH 55-64 | | 1,744 | |
| 50% and below AMI HH 65-74 | | 1,167 | |
| 50% and below AMI HH 75+ | | 1,001 | |
| 80% and below AMI 55-64 | | 2,158 | |
| 80% and below AMI 65-74 | | 1,425 | |
| 80% and below AMI HH 75+ | | 1,242 | |
| Percent of 30% and below AMI HH 55-64 | | 36% | |
| Percent of 30% and below AMI HH 65-74 | | 22% | |
| Percent of 30% and below AMI HH 75+ | | 18% | |
| Percent of very low income HH 55-64 | | 46% | |
| Percent of very low income HH 65-74 | | 31% | |
| Percent of very low income HH 75+ | | 26% | |
| Percent of low income HH 55-64 | | 57% | |
| Percent of low income HH 65-74 | | 37% | |
| Percent of low income HH 75+ | | 33% | |

NOTE: current percentages of area median income for one person: 30% = \$15,150 (applied 15k); 50% = \$25,200 (applied 25k); 80% = \$40,350 (applied 40k)

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
 NEW COLUMBIA – ZIP CODES 97203 AND 97217
 55+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 62,432 | 64,773 |
| Total 55-64 Population | 7,734 | 8,765 |
| Total 65-74 Population | 3,720 | 5,015 |
| Total 75-84 Population | 1,787 | 1,961 |
| Total 85+ Population | 1,092 | 1,024 |
| Total 55-64 Households | 4,568 | 5,144 |
| Total 65-74 Households | 2,367 | 3,169 |
| Total 75-84 Households | 1,215 | 1,327 |
| Total 85+ Households | 762 | 706 |
| *Income Eligible Households: | | |
| Total 55-64 | 2,126 | 2,318 |
| Total 65-74 | 1,360 | 1,773 |
| Total 75-84 | 824 | 883 |
| Total 85+ | 573 | 522 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 1,999 | 2,179 |
| Total 65-74 | 1,278 | 1,667 |
| Total 75-84 | 618 | 662 |
| Total 85+ | 429 | 392 |
| Total Income & Health Eligible Households | 4,325 | 4,900 |
| **Current Available Units | 284 | 284 |
| Total Market Potential Remaining | 4,041 | 4,616 |

*below 40K

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
 NEW COLUMBIA – ZIP CODES 97203 AND 97217
 55+ HOUSEHOLDS @ 50% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 62,432 | 64,773 |
| Total 55-64 Population | 7,734 | 8,765 |
| Total 65-74 Population | 3,720 | 5,015 |
| Total 75-84 Population | 1,787 | 1,961 |
| Total 85+ Population | 1,092 | 1,024 |
| Total 55-64 Households | 4,568 | 5,144 |
| Total 65-74 Households | 2,367 | 3,169 |
| Total 75-84 Households | 1,215 | 1,327 |
| Total 85+ Households | 762 | 706 |
| *Income Eligible Households: | | |
| Total 55-64 | 1,172 | 1,263 |
| Total 65-74 | 830 | 1,076 |
| Total 75-84 | 585 | 614 |
| Total 85+ | 439 | 387 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 1,102 | 1,187 |
| Total 65-74 | 780 | 1,011 |
| Total 75-84 | 439 | 461 |
| Total 85+ | 329 | 290 |
| Total Income & Health Eligible Households | 2,650 | 2,949 |
| **Current Available Units | 284 | 284 |
| Total Market Potential Remaining | 2,366 | 2,665 |

*below 25K

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
 NEW COLUMBIA – ZIP CODES 97203 AND 97217
 55+ HOUSEHOLDS @ 30% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 62,432 | 64,773 |
| Total 55-64 Population | 7,734 | 8,765 |
| Total 65-74 Population | 3,720 | 5,015 |
| Total 75-84 Population | 1,787 | 1,961 |
| Total 85+ Population | 1,092 | 1,024 |
| Total 55-64 Households | 4,568 | 5,144 |
| Total 65-74 Households | 2,367 | 3,169 |
| Total 75-84 Households | 1,215 | 1,327 |
| Total 85+ Households | 762 | 706 |
| *Income Eligible Households: | | |
| Total 55-64 | 605 | 654 |
| Total 65-74 | 451 | 583 |
| Total 75-84 | 261 | 277 |
| Total 85+ | 213 | 180 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 569 | 615 |
| Total 65-74 | 424 | 548 |
| Total 75-84 | 196 | 208 |
| Total 85+ | 160 | 135 |
| Total Income & Health Eligible Households | 1,348 | 1,506 |
| **Current Available Units | 284 | 284 |
| Total Market Potential Remaining | 1,064 | 1,222 |

**below 15K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
 NEW COLUMBIA – ZIP CODES 97203 AND 97217
 62+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 62,432 | 64,773 |
| Total 62-64 Population | 2,320 | 2,630 |
| Total 65-74 Population | 3,720 | 5,015 |
| Total 75+ Population | 2,879 | 2,985 |
| Total 62-64 Households | 1,370 | 1,543 |
| Total 65-74 Households | 2,367 | 3,169 |
| Total 75+ Households | 1,977 | 2,033 |
| *Income Eligible Households: | | |
| Total 62-64 | 638 | 696 |
| Total 65-74 | 1,360 | 1,773 |
| Total 75+ | 1,397 | 1,405 |
| Income & Health Eligible Households: | | |
| Total 62-64 | 600 | 654 |
| Total 65-74 | 1,278 | 1,667 |
| Total 75+ | 1,048 | 1,054 |
| Total Income & Health Eligible Households | 2,926 | 3,374 |
| **Current Available Units | 284 | 284 |
| Total Market Potential Remaining | 2,642 | 3,090 |
| Household Capture Necessary | 9.7% | 8.4% |

* below 40K

NEW COLUMBIA – ZIP CODES 97203 AND 97217

| | 2000 | 2011 (est.) | 2016 (proj.) |
|---------------------------------------|--------|-------------|--------------|
| Total Population | 58,041 | 62,432 | 64,773 |
| Total 55-64 Population | 4,362 | 7,734 | 8,765 |
| Total 65-74 Population | 2,719 | 3,720 | 5,015 |
| Total 75+ Population | 2,957 | 2,879 | 2,985 |
| 55-64 Population as Percent of Whole | 7.52% | 12.39% | 13.53% |
| 65-74 Population as Percent of Whole | 4.68% | 5.96% | 7.74% |
| 75+ Population as Percent of Whole | 5.09% | 4.61% | 4.61% |
| Total Households | 22,490 | 23,854 | 24,916 |
| Total 55-64 Households | 2,710 | 4,568 | 5,144 |
| Total 65-74 Households | 1,973 | 2,367 | 3,169 |
| Total 75+ Households | 2,178 | 1,977 | 2,033 |
| 55-64 Households as Percent of Whole | 12.05% | 19.15% | 20.65% |
| 65-74 Households as Percent of Whole | 8.77% | 9.92% | 12.72% |
| 75+ Households as Percent of Whole | 9.68% | 8.29% | 8.16% |
| 30% and below AMI HH 55-64 | | 605 | |
| 30% and below AMI HH 65-74 | | 451 | |
| 30% and below AMI HH 75+ | | 474 | |
| 50% and below AMI HH 55-64 | | 1,172 | |
| 50% and below AMI HH 65-74 | | 830 | |
| 50% and below AMI HH 75+ | | 1,024 | |
| 80% and below AMI 55-64 | | 2,126 | |
| 80% and below AMI 65-74 | | 1,360 | |
| 80% and below AMI HH 75+ | | 1,397 | |
| Percent of 30% and below AMI HH 55-64 | | 13% | |
| Percent of 30% and below AMI HH 65-74 | | 10% | |
| Percent of 30% and below AMI HH 75+ | | 10% | |
| Percent of very low income HH 55-64 | | 26% | |
| Percent of very low income HH 65-74 | | 18% | |
| Percent of very low income HH 75+ | | 22% | |
| Percent of low income HH 55-64 | | 47% | |
| Percent of low income HH 65-74 | | 30% | |
| Percent of low income HH 75+ | | 31% | |

NOTE: current percentages of area median income for one person: 30% = \$15,150 (applied 15k); 50% = \$25,200 (applied 25k); 80% = \$40,350 (applied 40k)

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
LLOYD CENTER ZIP CODES 97212, 97227, 97232
55+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,820 | 38,194 |
| Total 55-64 Population | 5,395 | 6,117 |
| Total 65-74 Population | 2,326 | 3,323 |
| Total 75-84 Population | 1,174 | 1,203 |
| Total 85+ Population | 974 | 961 |
| Total 55-64 Households | 3,421 | 3,881 |
| Total 65-74 Households | 1,591 | 2,276 |
| Total 75-84 Households | 852 | 874 |
| Total 85+ Households | 733 | 723 |
| *Income Eligible Households: | | |
| Total 55-64 | 1,130 | 1,242 |
| Total 65-74 | 846 | 1,157 |
| Total 75-84 | 471 | 466 |
| Total 85+ | 496 | 467 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 1,062 | 1,168 |
| Total 65-74 | 795 | 1,087 |
| Total 75-84 | 353 | 350 |
| Total 85+ | 372 | 350 |
| Total Income & Health Eligible Households | 2,582 | 2,955 |
| **Current Available Units | 481 | 481 |
| Total Market Potential Remaining | 2,101 | 2,474 |

**below 40K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
LLOYD CENTER ZIP CODES 97212, 97227, 97232
55+ HOUSEHOLDS @ 50% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,820 | 38,194 |
| Total 55-64 Population | 5,395 | 6,117 |
| Total 65-74 Population | 2,326 | 3,323 |
| Total 75-84 Population | 1,174 | 1,203 |
| Total 85+ Population | 974 | 961 |
| Total 55-64 Households | 3,421 | 3,881 |
| Total 65-74 Households | 1,591 | 2,276 |
| Total 75-84 Households | 852 | 874 |
| Total 85+ Households | 733 | 723 |
| *Income Eligible Households: | | |
| Total 55-64 | 709 | 769 |
| Total 65-74 | 543 | 737 |
| Total 75-84 | 300 | 282 |
| Total 85+ | 338 | 301 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 666 | 723 |
| Total 65-74 | 510 | 693 |
| Total 75-84 | 225 | 212 |
| Total 85+ | 254 | 226 |
| Total Income & Health Eligible Households | 1,655 | 1,853 |
| **Current Available Units | 481 | 481 |
| Total Market Potential Remaining | 1,174 | 1,372 |

*below 25K

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
LLOYD CENTER ZIP CODES 97212, 97227, 97232
55+ HOUSEHOLDS @ 30% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,820 | 38,194 |
| Total 55-64 Population | 5,395 | 6,117 |
| Total 65-74 Population | 2,326 | 3,323 |
| Total 75-84 Population | 1,174 | 1,203 |
| Total 85+ Population | 974 | 961 |
| Total 55-64 Households | 3,421 | 3,881 |
| Total 65-74 Households | 1,591 | 2,276 |
| Total 75-84 Households | 852 | 874 |
| Total 85+ Households | 733 | 723 |
| *Income Eligible Households: | | |
| Total 55-64 | 423 | 455 |
| Total 65-74 | 296 | 404 |
| Total 75-84 | 157 | 150 |
| Total 85+ | 184 | 165 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 398 | 428 |
| Total 65-74 | 278 | 380 |
| Total 75-84 | 118 | 113 |
| Total 85+ | 138 | 124 |
| Total Income & Health Eligible Households | 932 | 1,044 |
| **Current Available Units | 481 | 481 |
| Total Market Potential Remaining | 451 | 563 |

**below 15K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
LLOYD CENTER ZIP CODES 97212, 97227, 97232
62+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 37,820 | 38,194 |
| Total 62-64 Population | 1,619 | 1,835 |
| Total 65-74 Population | 2,326 | 3,323 |
| Total 75+ Population | 2,148 | 2,164 |
| Total 62-64 Households | 1,026 | 1,164 |
| Total 65-74 Households | 1,591 | 2,276 |
| Total 75+ Households | 1,585 | 1,597 |
| *Income Eligible Households: | | |
| Total 62-64 | 339 | 373 |
| Total 65-74 | 846 | 1,157 |
| Total 75+ | 966 | 933 |
| Income & Health Eligible Households: | | |
| Total 62-64 | 319 | 350 |
| Total 65-74 | 795 | 1,087 |
| Total 75+ | 725 | 700 |
| Total Income & Health Eligible Households | 1,838 | 2,137 |
| **Current Available Units | 481 | 481 |
| Total Market Potential Remaining | 1,357 | 1,656 |
| Household Capture Necessary | 26.2% | 22.5% |

* below 40K

| | 2000 | 2011 (est.) | 2016 (proj.) |
|---------------------------------------|--------|-------------|--------------|
| Total Population | 37,453 | 37,820 | 38,194 |
| Total 55-64 Population | 2,746 | 5,395 | 6,117 |
| Total 65-74 Population | 1,621 | 2,326 | 3,323 |
| Total 75+ Population | 2,309 | 2,148 | 2,164 |
| 55-64 Population as Percent of Whole | 7.33% | 14.26% | 16.02% |
| 65-74 Population as Percent of Whole | 4.33% | 6.15% | 8.70% |
| 75+ Population as Percent of Whole | 6.17% | 5.68% | 5.67% |
| Total Households | 17,114 | 17,459 | 17,958 |
| Total 55-64 Households | 1,634 | 3,421 | 3,881 |
| Total 65-74 Households | 1,160 | 1,591 | 2,276 |
| Total 75+ Households | 1,806 | 1,585 | 1,597 |
| 55-64 Households as Percent of Whole | 9.55% | 19.59% | 21.61% |
| 65-74 Households as Percent of Whole | 6.78% | 9.11% | 12.67% |
| 75+ Households as Percent of Whole | 10.55% | 9.08% | 8.89% |
| 30% and below AMI HH 55-64 | | 423 | |
| 30% and below AMI HH 65-74 | | 296 | |
| 30% and below AMI HH 75+ | | 341 | |
| 50% and below AMI HH 55-64 | | 709 | |
| 50% and below AMI HH 65-74 | | 543 | |
| 50% and below AMI HH 75+ | | 638 | |
| 80% and below AMI 55-64 | | 1,130 | |
| 80% and below AMI 65-74 | | 846 | |
| 80% and below AMI HH 75+ | | 966 | |
| Percent of 30% and below AMI HH 55-64 | | 12% | |
| Percent of 30% and below AMI HH 65-74 | | 9% | |
| Percent of 30% and below AMI HH 75+ | | 10% | |
| Percent of very low income HH 55-64 | | 21% | |
| Percent of very low income HH 65-74 | | 16% | |
| Percent of very low income HH 75+ | | 19% | |
| Percent of low income HH 55-64 | | 33% | |
| Percent of low income HH 65-74 | | 25% | |
| Percent of low income HH 75+ | | 28% | |

NOTE: current percentages of area median income for one person: 30% = \$15,150 (applied 15k); 50% = \$25,200 (applied 25k); 80% = \$40,350 (applied 40k)

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
GRESHAM, 3-MILE CC RADIUS
55+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 120,533 | 128,581 |
| Total 55-64 Population | 14,537 | 16,903 |
| Total 65-74 Population | 7,119 | 9,877 |
| Total 75-84 Population | 3,422 | 3,798 |
| Total 85+ Population | 2,059 | 2,070 |
| Total 55-64 Households | 8,319 | 9,653 |
| Total 65-74 Households | 4,177 | 5,773 |
| Total 75-84 Households | 2,064 | 2,270 |
| Total 85+ Households | 1,044 | 1,050 |
| *Income Eligible Households: | | |
| Total 55-64 | 2,560 | 2,894 |
| Total 65-74 | 2,163 | 2,866 |
| Total 75-84 | 1,408 | 1,507 |
| Total 85+ | 790 | 775 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 2,406 | 2,720 |
| Total 65-74 | 2,034 | 2,694 |
| Total 75-84 | 1,056 | 1,130 |
| Total 85+ | 592 | 581 |
| Total Income & Health Eligible Households | 6,088 | 7,126 |
| Current Available Units | 779 | 779 |
| Total Market Potential Remaining | 5,309 | 6,347 |

**below 40K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
GRESHAM, 3-MILE CC RADIUS
55+ HOUSEHOLDS @ 50% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 120,533 | 128,581 |
| Total 55-64 Population | 14,537 | 16,903 |
| Total 65-74 Population | 7,119 | 9,877 |
| Total 75-84 Population | 3,422 | 3,798 |
| Total 85+ Population | 2,059 | 2,070 |
| Total 55-64 Households | 8,319 | 9,653 |
| Total 65-74 Households | 4,177 | 5,773 |
| Total 75-84 Households | 2,064 | 2,270 |
| Total 85+ Households | 1,044 | 1,050 |
| *Income Eligible Households: | | |
| Total 55-64 | 1,425 | 1,589 |
| Total 65-74 | 1,340 | 1,783 |
| Total 75-84 | 949 | 988 |
| Total 85+ | 588 | 567 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 1,340 | 1,494 |
| Total 65-74 | 1,260 | 1,676 |
| Total 75-84 | 712 | 741 |
| Total 85+ | 441 | 425 |
| Total Income & Health Eligible Households | 3,752 | 4,336 |
| Current Available Units | 779 | 779 |
| Total Market Potential Remaining | 2,973 | 3,557 |

**below 25K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
GRESHAM, 3-MILE CC RADIUS
55+ HOUSEHOLDS @ 30% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 120,533 | 128,581 |
| Total 55-64 Population | 14,537 | 16,903 |
| Total 65-74 Population | 7,119 | 9,877 |
| Total 75-84 Population | 3,422 | 3,798 |
| Total 85+ Population | 2,059 | 2,070 |
| Total 55-64 Households | 8,319 | 9,653 |
| Total 65-74 Households | 4,177 | 5,773 |
| Total 75-84 Households | 2,064 | 2,270 |
| Total 85+ Households | 1,044 | 1,050 |
| *Income Eligible Households: | | |
| Total 55-64 | 749 | 821 |
| Total 65-74 | 670 | 884 |
| Total 75-84 | 450 | 452 |
| Total 85+ | 319 | 302 |
| Income & Health Eligible Households: | | |
| Total 55-64 | 704 | 772 |
| Total 65-74 | 630 | 831 |
| Total 75-84 | 338 | 339 |
| Total 85+ | 239 | 227 |
| Total Income & Health Eligible Households | 1,911 | 2,168 |
| Current Available Units | 779 | 779 |
| Total Market Potential Remaining | 1,132 | 1,389 |

**below 15K*

ATTACHMENT

DEMOGRAPHIC WORKSHEET FOR AFFORDABLE INDEPENDENT SENIOR HOUSING
GRESHAM, 3-MILE CC RADIUS
62+ HOUSEHOLDS @ 80% AND BELOW AMI

| | 2011 (est.) | 2016 (proj.) |
|---|-------------|--------------|
| Total Population | 120,533 | 128,581 |
| Total 62-64 Population | 4,361 | 5,071 |
| Total 65-74 Population | 7,119 | 9,877 |
| Total 75+ Population | 5,481 | 5,868 |
| Total 62-64 Households | 2,496 | 2,896 |
| Total 65-74 Households | 4,177 | 5,773 |
| Total 75+ Households | 3,108 | 3,320 |
| *Income Eligible Households: | | |
| Total 62-64 | 768 | 868 |
| Total 65-74 | 2,163 | 2,866 |
| Total 75+ | 2,300 | 2,398 |
| Income & Health Eligible Households: | | |
| Total 62-64 | 722 | 816 |
| Total 65-74 | 2,034 | 2,694 |
| Total 75+ | 1,725 | 1,799 |
| Total Income & Health Eligible Households | 4,480 | 5,309 |
| **Current Available Units | 779 | 779 |
| Total Market Potential Remaining | 3,701 | 4,530 |
| Household Capture Necessary | 17.4% | 14.7% |

* below 40K

ATTACHMENT

GRESHAM, 3-MILE CC RADIUS

| | 2000 | 2011 (est.) | 2016 (proj.) |
|---------------------------------------|---------|-------------|--------------|
| Total Population | 101,794 | 120,533 | 128,581 |
| Total 55-64 Population | 7,406 | 14,537 | 16,903 |
| Total 65-74 Population | 4,667 | 7,119 | 9,877 |
| Total 75+ Population | 4,889 | 5,481 | 5,868 |
| 55-64 Population as Percent of Whole | 7.28% | 12.06% | 13.15% |
| 65-74 Population as Percent of Whole | 4.58% | 5.91% | 7.68% |
| 75+ Population as Percent of Whole | 4.80% | 4.55% | 4.56% |
| Total Households | 36,971 | 43,686 | 47,168 |
| Total 55-64 Households | 4,266 | 8,319 | 9,653 |
| Total 65-74 Households | 2,782 | 4,177 | 5,773 |
| Total 75+ Households | 2,927 | 3,108 | 3,320 |
| 55-64 Households as Percent of Whole | 11.54% | 19.04% | 20.47% |
| 65-74 Households as Percent of Whole | 7.52% | 9.56% | 12.24% |
| 75+ Households as Percent of Whole | 7.92% | 7.11% | 7.04% |
| 30% and below AMI HH 55-64 | | 749 | |
| 30% and below AMI HH 65-74 | | 670 | |
| 30% and below AMI HH 75+ | | 769 | |
| 50% and below AMI HH 55-64 | | 1,425 | |
| 50% and below AMI HH 65-74 | | 1,340 | |
| 50% and below AMI HH 75+ | | 1,537 | |
| 80% and below AMI 55-64 | | 2,560 | |
| 80% and below AMI 65-74 | | 2,163 | |
| 80% and below AMI HH 75+ | | 2,300 | |
| Percent of 30% and below AMI HH 55-64 | | 9% | |
| Percent of 30% and below AMI HH 65-74 | | 8% | |
| Percent of 30% and below AMI HH 75+ | | 9% | |
| Percent of very low income HH 55-64 | | 17% | |
| Percent of very low income HH 65-74 | | 16% | |
| Percent of very low income HH 75+ | | 18% | |
| Percent of low income HH 55-64 | | 31% | |
| Percent of low income HH 65-74 | | 26% | |
| Percent of low income HH 75+ | | 28% | |

NOTE: current percentages of area median income for one person: 30% = \$15,150 (applied 15k); 50% = \$25,200 (applied 25k); 80% = \$40,350 (applied 40k)

DEMOGRAPHICS

The proceeding Preliminary Demographic worktables provide the basic information necessary to determine the marketability of a facility in Multnomah County. Demographic and income data for the table comes from data provided by Claritas/NPDC Corporation from the 2000 and 2010 census; health eligibility data comes from the National Center for Health Statistics (NCHS) and the experience of facilities similar to the proposed project, which have been constructed during the past ten to twenty years. The tables include the following sections - Total Population, Total Households, Health Eligible Households, Total Market Potential, and Gross Market Penetration Rates.

Total Population

The total population provides population figures for 2011 (estimates) and 2016 (projections) for the total population in the PMA and the sub-groups for ages 55-64, 65-74, 75-84, and 85 & Over.

Total Households

In this section, Total Population is reduced to households. Households are used as the primary unit of analysis because decisions about residency are most often made by households and not individuals. In addition, relatively accurate income information is available only for households.

Health Eligible Households:

This section includes that percentage of households that would most likely live independently and not be requiring of any extended care or services, such as those that may be available in an assisted living or similar type of facility. This segment of the population may however find retirement apartments and/or the related service offerings attractive. As this is the portion of the population that has range of choice with regard to their living situations, the determination of an accurate percentage is difficult and may actually overlap percentages that are extracted out for other populations. For this review we have applied ninety-four percent of the population aged 55 to 74 and seventy-five percent of the 75 and over population.

Number in Comparable Facilities:

Following a cursory review only, we have included here all affordable units that were located in senior only buildings. This number of units, available to serve the Health Eligible Households is consequently subtracted.

Total Market Potential:

The Total Market Potential is arrived at by subtracting the number of households in comparable facilities, from the total Health Eligible Households. The Total Market Potential is then, in essence, the total estimated or projected number of households who would be the most likely candidates from a health functionality stand point.

Appendix F – Assisted Living Conversion Program Grantees

| HUD Assisted Living Conversion Program (ALCP) FY 2007 - 2009 | | | | | | |
|---|--------------------|----------------|-----------------------------|--|--|--|
| Name of Project | Location | Funding | # of Units Converted | Specific unit modifications mentioned, if mentioned | Additions/changes to building proposed | Code compliance/licensing mentioned |
| FY2009 | | | | | | |
| Kivel Manor ¹ | Phoenix, AZ | \$3,292,367 | 15 | | Garden designed for persons with dementia | Code compliance |
| N.M. Carroll Manor Apartments | Baltimore, MD | \$5,020,436 | 16 | Widening doors, bathroom/kitchen improvements | Medical care room & community room | Licensed as a Supportive Housing (SH)/Assisted Living Services Program in accordance with Maryland DOA |
| Bernardine Apartments, Inc. | Syracuse, NY | \$2,544,147 | 10 to 9 | bathrooms, kitchens, doors | Resident lounge; life safety improvements | Comply with handicapped accessibility requirements |
| Hopeton Village, NCR of Ohio ² | Chillicothe, OH | \$3,988,867 | 25 | | | Meet handicapped accessibility requirements |
| Portage Trail Village, NCR of Ohio ² | Cuyahoga Falls, OH | \$3,972,699 | 39 | | Spaces for supportive services and accommodation | Meet handicapped accessibility requirements, meet Ohio Revised Code and Residential Care Regulations |

| Name of project | Location | Funding | # of Units converted | Specific unit modifications mentioned, if mentioned | Additions/changes to building proposed | Code compliance/licensing mentioned |
|---|-----------------|-------------|----------------------|---|--|---|
| FY2008 | | | | | | |
| New Haven Jewish Community ² | New Haven, CT | \$6,048,306 | 16 | kitchen redesign, upgraded bathrooms w/grab bars, wall reinforcements, roll-in showers with a seat, emergency call system with central monitoring added to bathroom & sleeping area | Fully accessible elevator | |
| Hacienda Villas, Inc. | Tampa, FL | \$5,664,250 | 36 | | Administrative offices, nurse station, entrance, update central kitchen and elevators | |
| Peter Sanborn Place, Inc. | Reading, MA | \$2,772,557 | 26 | | Fire suppression system, dining room, commercial kitchen, laundry facilities | MA Fire Department requirements |
| Bernardine Apartments, Inc. | Syracuse, NY | \$3,340,323 | 26 | | Lounge, dining hall, laundry facilities | |
| Hopeton Village, NCR of Ohio | Chillicothe, OH | \$2,119,826 | 34 | Reconfiguration of bathroom, bedroom doors, unit door entrances; floor, wall, ceiling finishes, new lighting to improve light levels and reduce energy usage | Altered and expanded common areas; commercial kitchen, dining room, therapy room, commercial laundry, nursing offices, exercise room, resident laundry | Meet handicapped accessibility requirements |

| Name of Project | Location | Funding | # of Units Converted | Specific unit modifications mentioned, if mentioned | Additions/changes to building proposed | Code compliance/ licensing mentioned |
|------------------------------------|--------------------|-------------|----------------------|--|---|--------------------------------------|
| Portage Trail Village, NCR of Ohio | Cuyahoga Falls, OH | \$5,040,351 | 32 | reconfiguration of bathroom, bedroom doors, unit door entrances; floor, wall, ceiling finishes, new lighting to improve light levels and reduce energy usage | Altered and expanded common areas; commercial kitchen, dining room, therapy room, commercial laundry, nursing offices, exercise room, resident laundry | |
| Mercy Elderly Housing Corporation | Yeadon, PA | \$2,319,674 | 20 | | Dining room, commercial kitchen, laundry facilities, wellness center, caregiver's space, storage area, therapy and rehab room, interconnected sitting and activity area | |
| FY2007 | | | | | | |
| Christian Care Manor IV | Mesa, AZ | \$4,019,569 | 40 | Tubs to showers | Common space, staff offices, commercial kitchen, dining room, commercial laundry facilities, additional elevator | Handicapped accessibility codes |

| Name of Project | Location | Funding | # of Units Converted | Specific unit modifications mentioned, if mentioned | Additions/changes to building proposed | Code compliance/licensing mentioned |
|--------------------------------------|--------------|-------------|----------------------|--|---|-------------------------------------|
| Christian Care Manor II ² | Phoenix, AZ | \$1,315,303 | 24 | Tubs to showers | | Handicapped accessibility codes |
| Bonnie Brae Terrace | Belmont, CA | \$4,276,091 | 24 | Widening doors to 36", wire type pulls on all kitchen cabinets and drawers, adjustable height closet shelving, higher wall outlets, lower wall switches and controls, renovate bathrooms | Communication system between the new AL units and a new nurse's station, activity room, common kitchen with food warming equipment & refrig for meal program, staff rest area for 24 oversight staff; corridor railings, new therapeutic shower area and changing area; laundry room made more accessible | |
| AuSable Valley Apartments, Inc. | Fairview, MI | \$1,960,361 | 10 | Private kitchenette, fully accessible bathrooms | Created a single corridor of AL units, living area, dining area, communal kitchen, laundry room, office/storage space, monitoring stations | |

| Name of project | Location | Funding | # of Units converted | Specific unit modifications, if mentioned | Additions/changes to building proposed | Code compliance/licensing mentioned |
|---------------------------------------|--------------|-------------|----------------------|---|--|--|
| New Hope V.O.A. Elderly Housing, Inc. | New Hope, MN | \$2,430,264 | 20 | Kitchen and bathroom reconfiguration (i.e., wheelchair clearances, wall reinforcement, grab bars, elevation of counters and work surfaces), bedroom, living and dining modifications, widen doors | Upgrades to common space, office, storage, monitoring stations, relocate emergency call devices, new electric load center, expand dining area, add a vestibule between dining and exterior patio | |
| Trent Center | Trenton, NJ | \$2,271,953 | 17 | Widening and overall modification of doors, bathroom and kitchen renovations | Common area renovations on two floors including corridor railings, electrical outlets, switches, lighting and flooring; renovations to office area. | Handicapped accessibility requirements |
| Bernardine Apartments ² | Syracuse, NY | \$3,754,850 | 35 | Upgrades to bathrooms, kitchens, closets, doors | Common areas on 4 floors will be created; 2 community lounges, laundry area, dining area | Handicapped accessibility requirements |

| | | | | | |
|--|--------------|-------------|---|--|----|
| Styglers Commons, NCR of Northern Columbus | Columbus, OH | \$2,194,899 | bathroom fixtures, walk-in showers, new HVAC systems, kitchen appliances, cabinets, countertops, new flooring | Vestibule/lobby area, new elevator, an office, congregate dining space, full service kitchen, nurse's offices, community space | 32 |
|--|--------------|-------------|---|--|----|

1. Kivel Manor proposed services of 3 meals/day, housekeeping & laundry and expanding role of service coordinator; target population for ALCP is persons with dementia
2. These properties had previously received ALCP funding

Appendix G - References

Baggett, S., Neal, M., Iroz-Elardo, N., & Huguet, N. (2008). Multnomah County Aging & Disability Services 2008 Community Needs Survey Final Report (Portland, OR: Portland State University Institute on Aging).

Belew, R. R. (2010). Indoor air quality. *Long-Term Living*, 59(6), 24-26.

Carder, P.C., & Zoller, E. (2009). State Experiences with Affordable Housing Plus Services. Report to the Oregon Department of Human Services, Seniors and Persons with Disabilities. Available, Institute on Aging, Portland State University.

Curry-Stevens, A., Cross-Hemmer, A., & Coalition of Communities of Color (2010). *Communities of Color in Multnomah County: An Unsettling Profile*. Portland, OR: Portland State University.

Dugdale, D. and Zieve, D. (2010). *Aging Changes in the Senses*. MedlinePlus, U.S. National Library of Medicine, National Institutes of Health. Retrieved from MedlinePlus website at: <http://www.nlm.nih.gov/medlineplus/ency/article/004013.htm>

Federation for American Immigration Reform (FAIR). *County Factsheet: Multnomah County, Oregon*. Retrieved on 09/16/11 at: http://www.fairus.org/site/PageNavigator/facts/county_data_OR_multnoma

Glastonbury Housing Authority. (2009) *Herbert T. Clark House*. Glastonbury, CT. Retrieved from: <http://www.glastha.org>

Golant, S. (2008). The Future of Assisted Living Residences: A Response to Uncertainty. In S. Golant & J. Hyde (Eds.), *The Assisted Living Residence* (329-350). Baltimore: John Hopkins University Press.

Harahan, M., Sanders, A., and Stone R. (2006). *Lessons from the workshops on affordable housing plus services strategies for low and modest income seniors*. Washington, DC: Institute for the Future of Aging Services.

Hernandez, M. (2007). Assisted living and residential care in Oregon: Two decades of state policy, supply, and Medicaid participation trends. *The Gerontologist*, 47 (supp), 118-124.

Heumann, L., Winter-Nelson, K., and Anderson, J. (2001). *The 1999 Survey of Section 202 Housing for the Elderly*. AARP Public Policy Report #2001-02. Washington DC: AARP. Retrieved from: http://www.aarp.org/research/ppi/liv-com/housing/articles/fs65r_housing.html

Immigrant and Refugee Community Organization (IRCO). (2011). Retrieved from IRCO website at: <http://www.irco.org/>

Kochera, A. (2002). *Serving the Affordable Housing Needs of Older Low Income Renters: A Survey of Low Income Housing Tax Credit Properties*. Washington, DC: AARP.

Leading Age Center for Applied Research. (May, 2011). Summit on Aging in Place in Public Housing. Retrieved from Leading Age website at: [http://www.leadingage.org/uploadedFiles/Content/About/Center for Applied Research/Expanding Affordable Housing Plus Services/Public Housing Authority Summit.pdf](http://www.leadingage.org/uploadedFiles/Content/About/Center%20for%20Applied%20Research/Expanding%20Affordable%20Housing%20Plus%20Services/Public%20Housing%20Authority%20Summit.pdf)

Locke, G., Lam, K., Henry, M., & Brown, S. (February, 2011). *End of Participation in Assisted Housing: What Can We Learn About Aging in Place?* Report prepared by Abt Associates Inc. for the U.S. Department of Housing and Urban Development, Office of Policy Research and Development. Retrieved from: [http://www.huduser.org/publications/pdf/Locke AgingInPlace AssistedHousingRCR03.pdf](http://www.huduser.org/publications/pdf/Locke%20AgingInPlace%20AssistedHousingRCR03.pdf)

Mandel, J. (2011, September 23). Email interview.

Milbank Memorial Fund and the Council of Large Public Housing Authorities. (2006). *Public housing and supportive services for the frail elderly: A guide for housing authorities and their collaborators*. Retrieved from: <http://www.milbank.org/reports/0609publichousing/0609publichousing.pdf>

Mollica, R. L., Johnson-Lamarche, H., & O'Keeffe, J. (2005). *State residential care and assisted living policy: 2004*. Retrieved from U.S. Department of Health and Human Services website: <http://aspe.hhs.gov/daltcp/reports/2005/04alcom.htm>

Multnomah County Aging & Disability Services (ADS) (2011). Older Americans Act Area Plan, 2008-2011. Multnomah County, Oregon.

Parton HB, Greene R, Flatley AM, Viswanathan N, Wilensky L, Berman J, Ralph N, Schneider AE, Uribe A, Olson EC, Waddell EN, Thorpe LE. (May, 2011). *Health of Older Adults in New York City Public Housing: Findings from the New York City Housing Authority Senior Survey*. A joint report by the New York City Housing Authority, the New York City Departments of Health and Mental Hygiene and for the Aging, and the City University of New York School of Public Health at Hunter College.

Pynoos, J., Mayeda, A., Lee, C. (2003). *Home modification resource guide*. The National Resource Center on Supportive Housing and Home Modification. Los Angeles. Retrieved from: http://www.homemods.org/resources/PDF/hm_res_gd_03.pdf

Office of Economic Analysis, State of Oregon, April 2004. State and County Population Forecasts and Components of Change, 2000 to 2004. Available at: <http://www.oea.das.state.or.us/DAS/OEA/demographic.shtml>

Oregon Health Policy Research (OHPR). (2009). Oregon Community-Based Long-Term Care: Assisted living and Residential Care Facilities 2008. Available at: http://www.oregon.gov/OHA/OHPR/RSCH/docs/ALF_RCF/2009ALF_RCF_Report_Final.pdf?ga=t

Oregon Refugee Program. Retrieved from the State of Oregon Refugee Program website at: <http://www.oregon.gov/DHS/assistance/refugee/>

Redfoot, D. and Kochera, A. (2004). Targeting Services to Those Most at Risk: Characteristics of Residents in Federally Subsidized Housing. *Journal of Housing for the Elderly*, 18 (137-163).

Siewe, Y. (2009). Understanding the Effects of Aging on the Sensory System. Oklahoma Cooperative Extension Service. Oklahoma State University. Retrieved from: <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2418/T-2140web.pdf>

Stone, R., Harahan, M., and Sanders, A. (2008). Expanding Affordable Housing with Services for Older Adults: Challenges and Potential. In S. Golant & J. Hyde (Eds.), *The Assisted Living Residence* (329-350). Baltimore: John Hopkins University Press.

U.S. Census, Population Division, March 2010. Population Estimates. United States Census Bureau.

United States Department of Housing and Urban Development. (February, 2011). Retrieved from: <http://independentlivingdesign.com/news/top-11-home-modifications-for-seniors/>