

# STATE OF ALASKA

DEPT. OF HEALTH AND SOCIAL SERVICES

ALASKA PIONEER HOMES

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March 19, 2010

William H. Hogan, Commissioner  
Department of Health and Social Services  
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Dear Commissioner Hogan,

For the last 10 years, the Alaska Pioneer Homes have been licensed as assisted living facilities, offering a high degree of professional services to our residents. We provide services for older Alaskans who require daily assistance ranging from minor help with daily living skills to complex assistance with health, personal and end of life care. The Pioneer Homes specialize in serving residents with dementia. The range of care typically falls into three categories: Level I, II or III. Requests for admission to a Pioneer Home are primarily Level III applicants, which is the highest level of care the Pioneer Homes are licensed to provide and applicants who are Level I and at the lowest level of care are uncommon. The proportion of Level III residents has increased from 25% in June 1995 to 58% in June of 2009. Conversely, Level I residents have decreased from 37% to 12% during this same time frame. These numbers are an indication that Home and Community Based Services have enabled Alaskan seniors to remain in their home longer and that seniors only seek the services of the Pioneer Homes when they reach a higher acuity level, requiring Level III services. There will undoubtedly be a need for more assisted living beds in the future.

What future role should the Alaska Pioneer Homes play in providing for the increased need for elder services? What role should the Pioneer Homes play in addressing the increased demand for the care of seniors with dementia? How will the department address the needs of seniors with assaultive behaviors or mental health issues? And, should the Pioneer Homes system be proactive and begin planning expansion now instead of waiting until the state faces a crisis in the future? These are the major questions we endeavored to answer in this report. Through the report, Planning for Tomorrow, it is clear that the pioneer homes are a vital part of Alaska's overall long term care needs.

The Alaska Pioneer Homes concur with the findings of this report that recommend:

- That the State should develop additional beds, in the existing Pioneer Home system, in at least two communities and evaluate the impact of additional beds on the waitlist

- Expand the existing bed capacity of the Pioneer Homes by developing a facility with 40 – 60 beds that can better facilitate the Eden Alternative philosophy and properly utilize the economies of scale of a larger facility
- Assist the mental health system in understanding the needs of their older beneficiaries with mental health issues
- The State should provide access to tele-psychiatry to all Pioneer Homes
- Continue to explore creating a geriatric psychiatric unit in the state of Alaska

The Alaska Pioneer Homes intend to seek support and funding for expanding its bed capacity. The expansion would be accomplished in phases as follows:

- Analyze the 16 acre parcel where the Fairbanks Pioneer Home is located to determine the feasibility of building a new Pioneer Home or an addition to the existing building for additional bed capacity.
- Expand the Juneau Pioneer Home by adding a 25 bed wing to the existing facility.
- Construct two additional 40 – 60 beds in Anchorage, Kenai Peninsula, or the Mat-Su valley.

Respectfully Submitted,

*David D. Cote, Jr.*

Dave Cote, Director  
Alaska Pioneer Homes

*Banarsi Lal*

Banarsi Lal, Chair  
Pioneer Home Advisory Board



# Alaska's Pioneer Homes Planning for Tomorrow

PREPARED FOR THE ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES

**DECEMBER 2009** | FINAL REPORT

# Alaska's Pioneer Homes: Planning for Tomorrow

DECEMBER 2009 | FINAL REPORT

*We express grateful appreciation to the Alaska Department of Health and Social Services and the staffs of the Pioneer Homes of Alaska*

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# Summary & Recommendations

The Pioneer Homes have a long history of providing care to Alaska's elderly and are an important part of the senior services continuum of care. The number of seniors is projected to grow swiftly over the next 20 years as "Baby Boomers" reach old age. The need for affordable and accessible care options will increase as the number of seniors grows. The purpose of this project is to assess the future program needs of the Pioneer Homes, focusing on the increase in Level III residents, the decrease in Level I residents, new philosophies of care, possible expansion of the Pioneer Home system to new communities, and to address the increasing number of seniors with assaultive behavior and mental health issues. In addition, a family survey was conducted to gather information about current Pioneer Homes and recommendations for the future.

While the increase in Alaska's senior population over the next 20 years is a certainty, the future need for Pioneer Home beds is less clear. Many factors will affect the need and demand for Pioneer Home and other assisted living services, including:

- The availability of community-based services, which are critical for helping seniors stay in their homes. Reductions in these programs or caps on payment sources could result in more people needing assisted living services.
- Advances in assistive technology may make it possible for people to remain in their homes longer.
- Medical advances, including advances that slow the progression, or provide a cure for Alzheimer's disease, could reduce the need for assisted living.
- Changes in federal programs that pay for assisted living services or community-based services for older Alaskans, , would impact demand for Pioneer Homes. In particular further restrictions, or the elimination of the Medicaid Waiver program, would eliminate the only funding source for assisted living services outside the State supported Pioneer Home system for many seniors.
- Changes in State support will also impact the number of residents in Pioneer Homes. Greater funding support from the Alaska Legislature for the existing facilities would allow Pioneer Homes to staff for higher levels of care and increase their capacity to achieve higher occupancy levels.
- And finally, the most important factor is the extent to which the Alaska Legislature supports the growth of the Pioneer Homes by investing in new or

expanded facilities to increase the number of beds to meet the needs of the state’s burgeoning senior population.

Despite these uncertainties, there will undoubtedly be a need for more assisted living beds in the future. The question is what role Pioneer Homes will take in providing those services. Will the State continue operating the existing Pioneer Homes with no expansions? Will the State privatize the Pioneer Homes, getting out of the assisted living business altogether? If it is decided there should be greater availability of Pioneer Home services, where and when should new Pioneer Homes be constructed?

It is important that policy makers understand that funding levels for all senior services must increase to meet the needs of the rapidly increasing number of seniors. Taking funding from community-based services to fund the Pioneer Homes is not a fiscally responsible solution. Such a move would actually force more seniors into higher levels of care, increasing demand for assisted living homes and nursing homes, which are more expensive and less desirable to most seniors than in-home services.

The following sections of the report provide information and discussion on the projected growth of the senior population in Alaska, the senior services continuum of care with a focus on assisted living homes, the current residents of the Pioneer Homes, and the impact on demand for Pioneer Home services.

## Recommendations

- 1. Projected Bed Demand:** Table 1 below projects the number of beds required in the Pioneer Home system if the current age specific utilization rate were applied across the increase in elder population expected for each elder age group. This projection was completed for each of the Pioneer Home service areas. If these beds were all provided by 2015, there will be demand for 98 new beds statewide. The first communities to receive additional beds should be those with the highest number of people on the active waitlist: Anchorage, Palmer and Fairbanks.

**Table 1: New beds needed to meet projected demand, 2015-2030**

Pioneer Home	Occupied Beds*	2015	2020	2025	2030
Anchorage	164	35	49	82	121
Fairbanks	84	20	23	37	65
Palmer	70	25	28	37	58
Juneau	43	5	9	15	27
Ketchikan	40	6	10	14	11
Sitka	58	7	12	17	16
<b>Total</b>	<b>459</b>	<b>98</b>	<b>131</b>	<b>202</b>	<b>298</b>

\*June 2009

*We recommend the State develop a limited number of additional beds in at least two communities and evaluate the impact of additional beds on the waitlist.*

- 2. Green Houses®:** All of the existing Pioneer Homes have limitations in structure, zoning, and/or design that make it difficult to expand bed capacity through renovation; in addition current thinking in long term care delivery is moving away from larger institutional designs. The design and layout of the existing facilities create barriers to integration of some elements of the Eden Alternative into Pioneer Homes and long hallways make it difficult for nursing staff to monitor residents in higher levels of care. These limitations will require the addition of significant new space either through additions on existing facilities or construction of new facilities to materially expand the bed capacity in the Pioneer Home system. More information on the Eden Alternative and Green House models is included in the section on Planning for Tomorrow. Evaluation of the Green House model has consistently demonstrated higher levels of satisfaction in residents, families and employees in these facilities after the transfer from larger institutional settings. Pioneer Homes should test the Green House model through the development of a focused and limited pilot project of two to four facilities (20 to 48 beds) that would increase bed capacity for ADRD or level III residents in smaller increments. These should be constructed either as individual Green House modules in proximity or in some situations located on the site with existing Pioneer Homes. Development of the Green Houses in a pilot program would provide the State the opportunity to formally evaluate the acceptability of this modality of care to the resident’s families and employees. It will also ease the negotiation of the required work rule changes with the public employee unions that will be necessary to fully implement the model.

*We recommend the State construct four small (10- to 12-bed) Green Houses as a pilot to evaluate this exciting new service delivery model for the Pioneer Home System, and complete a careful review of resident, family and employee satisfaction levels as well as comparative costs to assess whether they are a good fit for the Pioneer Home system.*

- 3. New Facility Locations:** The communities where Pioneer Homes are currently located are in the most populated parts of the state and each has an established place in that region’s senior services continuum. We recommend the pilot Pioneer Home beds/facilities be built in two of these communities (Anchorage, Palmer, Fairbanks, Juneau, Sitka and Ketchikan) with the new Green Houses administered as satellites of the existing Pioneer Homes. Locating new facilities in areas where Pioneer Homes are currently located will allow efficiencies in administrative overhead and make it possible to consolidate functions such as

nutrition, recreation and therapy services. The one exception to this is the recommendation may be that the development of a Green House, affiliated with the Anchorage Pioneer Home and specializing in Alzheimer's disease and dementia be explored on the Kenai Peninsula with the long term care providers currently providing service in this region.

*We recommend the pilot Pioneer Home beds/facilities be built in two of these communities (Anchorage, Palmer, Fairbanks, Juneau, Sitka and Ketchikan) with the new Green Houses administered as satellites of the existing Pioneer Homes.*

- 4. Cost of Construction:** National average construction costs reported for a typical one-story Green House home range from \$1.5 million and up depending on local construction costs. Cost are also dependent on project-specific decisions about design, finishes, etc. Generally, costs for a one-story, 10-bedroom Green House home are reported to fall roughly in the middle of the range between multi-family residential and institutional construction costs if built in the same location. The costs for a Green House home developed in a multi-story building are closer to institutional construction costs. We have found only two benchmarks for determining cost of construction for an assisted living facility using the Green House model in Alaska. They are estimates from AHFC for construction of assisted living homes in 11 Alaska communities and construction costs for the Providence Seward Mountain Haven Green House nursing facility. The AHFC estimates are for the construction of single-family residences that serve as assisted living homes. The Providence Seward Mountain Haven Green Houses is a nursing home built to Green House standards. Construction costs for AHFC assisted living homes averaged \$280 per square foot, and the costs for the Seward Mountain Haven Green Houses were approximately \$610 per square foot. Using the higher cost estimate from Seward as our guideline, the cost of construction for the first Green House Pioneer Homes would be between \$3.9 and \$4.6 million per 10-bed unit in 2009 dollars if the facilities are constructed in Anchorage, Palmer or Fairbanks location.
- 5. Expansion into Rural Areas:** Despite the underserved nature of rural communities accessible only by air, the small populations involved and the exploding demand for assisted living services statewide will make it difficult to prioritize the development of new state-operated Pioneer Homes in these frontier areas of the state. In addition, several long term care projects are in development in rural Alaska, and the Pioneer Homes should remain cautious about developing competing facilities in Bethel or other rural communities that may overwhelm demand and possibly threaten the sustainability of tribally operated nursing or assisted living facilities currently under development.

*We recommend the State focus first on increasing access and utilization of Pioneer Homes by Alaska residents living in underserved regions by providing increased education to rural elders on the application waiting list process and encouraging elders to actively plan for long term care needs.*

- 6. Assaultive/Disruptive Residents:** An analysis of Pioneer Home incident reports showed that there are a relatively small number of residents who repeatedly assault other residents or staff members. However, these residents disrupt the Pioneer Homes, upset and frighten residents, and require more staff time for supervision. Even with projected increases in the number of elders needing assisted living services, and increases in the number of elders with chronic mental illnesses and Alzheimer’s disease and related dementias, the number of seniors needing behavioral intervention services for assaultive behavior will not be large. Rather than viewing removal of these residents as the primary solution, we encourage the Department to move forward by first providing staff training and tele-psychiatry support to the Pioneer Homes, while working on solutions that will meet the long-term needs of the Pioneer Homes and other senior residential care facilities. The Pioneer Homes are already working with the Training Center in the Certified Nursing Assistant (CNA) Training Program. The director of the center is interested in developing a behavioral health training module, much like the training they currently offer in dementia. There are also opportunities for collaboration with the Alaska Geriatric Education Center at the University of Alaska Anchorage (UAA) and the Alaska Mental Health Trust Training Cooperative at the UAA, each of which provides training to workers providing care to seniors. Assisted living homes and nursing homes are also experiencing problems with disruptive/or assaultive patients or residents.

*We recommend the State provide access to tele-psychiatry to all Pioneer Homes. This will provide support for continuing management and treatment for residents with chronic mental illnesses. In addition it will support Pioneer Home staff when they intervene with acutely disruptive residents.*

*We recommend that the State provide ongoing training and continuing resource support for Pioneer Home staff, including all direct care givers, to assist them in dealing with assaultive residents in order to provide increased safety and security for all residents and staff, and to improve the care of residents with chronic mental illnesses.*

*We recommend the State coordinate behavioral intervention services planning with all senior residential care providers, including community assisted living homes, nursing homes and Pioneer Homes.*

*We recommend the State require Community Behavioral Health Centers in communities where Pioneer Homes are located to develop Memoranda of Agreement with the Pioneer Homes for the provision of behavioral health services to Pioneer Home residents.*

# Senior Population Trends

## National Level

Research into national trends reveals that the senior population will continue to grow significantly. Even though the rise in the number of older Americans slowed during the 1990s because of the relatively small number of babies born six decades earlier during the Great Depression, figures indicate that the population of older Americans will burgeon between 2010 and 2030 when the Baby Boom generation reaches age 65. According to the U.S. Department of Health and Human Services Administration on Aging, the population of Americans age 65 and over will increase from 35 million in 2000 to 40 million in 2010 (up 15 percent), and then to 55 million in 2020 (a further 36 percent increase). By 2030, there will be about 72.1 million senior citizens in the nation, almost twice the number in 2007.

Not only is the number of older Americans expected to grow, but the proportion of seniors in the population is rising as well. People 65 and older represented 12.6 percent of the population in 2007 but are expected to be almost 20 percent of the population by 2030. The Institute for Social and Economic Research (ISER) at the University of Alaska Anchorage projects that the percentage of seniors in the U.S. population may reach 20.4 and 20.7 percent by 2040 and 2050, respectively.

## State Level

At 50 years of statehood Alaska is still a young state, but its population echoes national demographic trends with an increasing number and proportion of older Alaskans as the Baby Boom reaches retirement age. The Alaska population in general continues to increase and has been doing so every year since statehood with the exception of three years (1977-1978, 1986-1987, 1987-1988). The Alaska Department of Labor and Workforce Development (ADOLWD) attributes the continued growth since 2000 to natural increase, that is births minus deaths, which added 58,090 people from 2000 to 2008, while net-migration (in-migration minus out-migration) accounted for a loss of 5,910 people. During 2007-2008, Alaska added 7,770 people through natural increase and lost 2,560 people to net out-migration.

As for the population of Alaskans age 65 and older, the number of seniors leaving Alaska has been roughly equal to the number arriving in recent years. Out-migration patterns have not changed substantially in decades for this population segment, according to the Alaska Commission on Aging. Despite this, the commission reported in 2008 that Alaska now has the fastest-growing senior population of the

50 states, with an increase of almost 50 percent among individuals age 65 and older during the previous ten years.

The fact that in- and out-migration of seniors has been neutral means that the increase in older Alaskans can be attributed to other factors. These factors include the maturing generation of Baby Boomers, many of whom came to Alaska in the 1970s and made Alaska home. This segment of the population laid the foundation for multigenerational population growth when they chose to stay, buy homes and now have children and grandchildren who are now Alaskan. While some will retire outside of Alaska, many have been the inspiration for friends and family members to move to Alaska in their wake.

The Alaska Native population has roots that go back thousands of years in Alaska. According to the ADOLWD and the Alaska Commission on Aging, the Alaska Native population also expanded during the Baby Boom era, and these Alaskans are especially likely to stay in Alaska during their senior years.

Another factor contributing to the national and state-level growth in the senior population is the increasing life expectancy of the population at large.

Population estimates for Alaska are available up to 2030. After that, it becomes difficult to project population trends with any degree of certainty. This is in part because Alaska is a large geography with a low population density. This makes projecting population a delicate exercise due to the number of unknown factors and events that are catalysts for population change. ADOLWD data show that in the year 2000, 5.7 percent of Alaskans were age 65 or older. Eight years later, 7.3 percent fit this demographic. State demographers expect Alaska’s senior population to grow to 7.9 percent of the total Alaska population by 2010 and 16.0 percent by 2030. Table 2 shows estimates for intervening years.

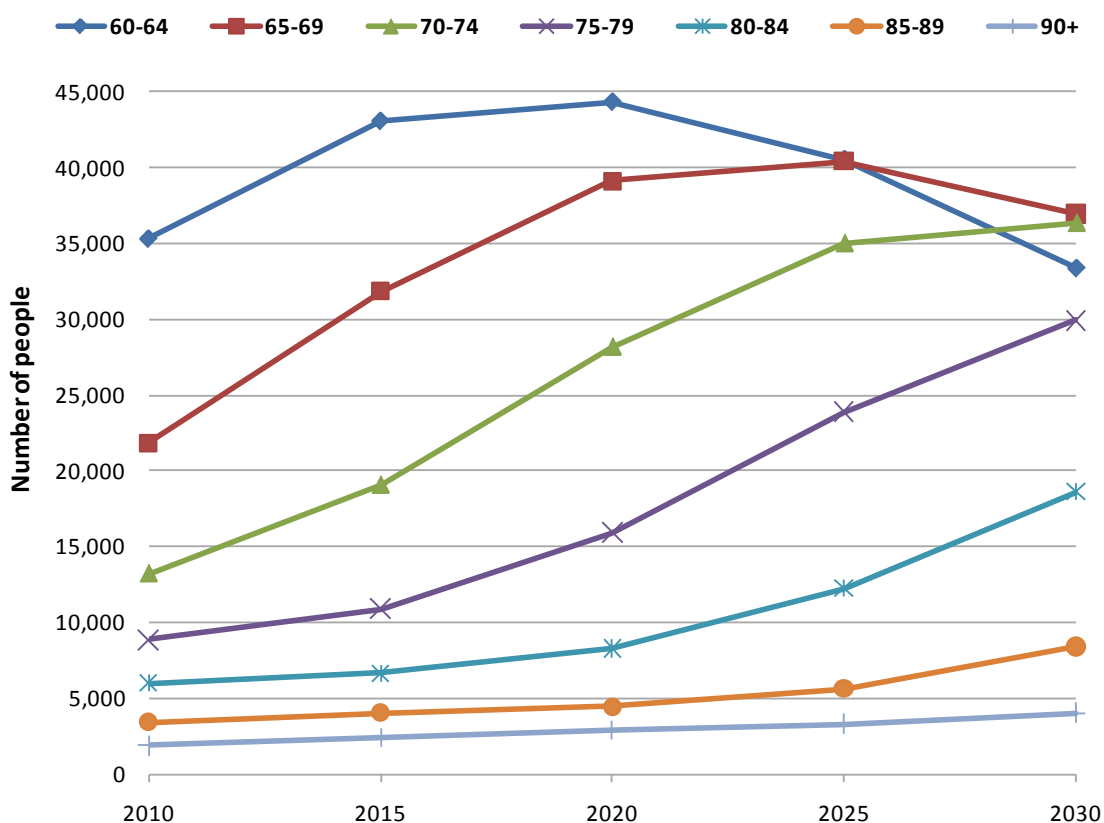
**Table 2: Projected growth of Alaska’s senior population, 2010-2030**

Year	2010	2015	2020	2025	2030
Est. state population	698,573	734,999	771,465	806,113	838,676
Est. percentage age 65+	7.9%	10.2%	12.8%	15.0%	16.0%

Source: Alaska Department of Labor & Workforce Development

ADOLWD has modeled the expected changes within Alaska’s older population by age group for each five-year period between 2010 and 2030. The projected increases as 2030 approaches can be seen in Table 3 for each five-year age group or cohort. All population cohorts starting with age 60 to 64 are expected to increase between 2010 and 2020. After 2020, a decline is expected in the number of Alaskans in their sixties, while the population of each cohort of Alaskans age 70 and up is expected to keep rising through 2030. These demographic shifts are mapped in Figure 1.

**Figure 1: Changes in Alaska's older population by age group, 2010-2030**



Source: Alaska Department of Labor & Workforce Development

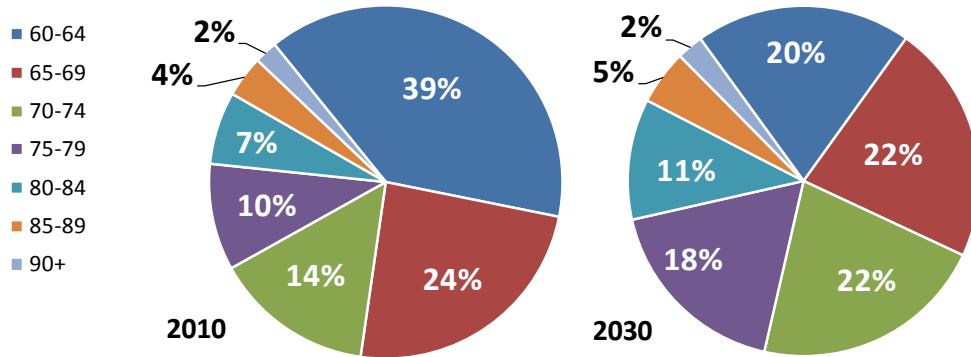
**Table 3: Alaska population projections by age group for ages 60 and up, 2010-2030**

Age	2010	2015	2020	2025	2030
60-64	35,359	43,061	44,317	40,560	33,434
65-69	21,872	31,865	39,135	40,455	36,954
70-74	13,251	19,091	28,193	35,020	36,363
75-79	8,854	10,924	15,916	23,880	29,953
80-84	6,026	6,655	8,278	12,264	18,645
85-89	3,435	4,033	4,475	5,635	8,414
90+	1,886	2,412	2,905	3,292	4,062

Source: Alaska Department of Labor & Workforce Development

The pie charts in Figure 2 show the effect these changes would have on the age mix within Alaska's older population over the next several decades. Note the downward trend in pre-seniors (age 60 to 64), and the substantial increase in seniors 65 to 84 years of age, who are expected to grow from 55 percent to 73 percent of the state's population age 60 and over. Meanwhile the share of the state's older population comprised of the eldest Alaskans (age 85+) would remain fairly constant at about six to seven percent, even while the actual number of Alaskans in these age groups would continue to grow.

**Figure 2: Make up of Alaska's older population by age group, 2010 and 2030**



The same projected shift in the age mix within Alaska's older population is shown by five-year interval in Table 4.

**Table 4: Composition of Alaska's older population by age group, 2010-2030**

Age	2010	2015	2020	2025	2030
60-64	39.0%	36.5%	30.9%	25.2%	19.9%
65-69	24.1%	27.0%	27.3%	25.1%	22.0%
70-74	14.6%	16.2%	19.7%	21.7%	21.7%
75-79	9.8%	9.3%	11.1%	14.8%	17.8%
80-84	6.6%	5.6%	5.8%	7.6%	11.1%
85-89	3.8%	3.4%	3.1%	3.5%	5.0%
90+	2.1%	2.0%	2.0%	2.0%	2.4%

Source: Alaska Department of Labor & Workforce Development

## Boroughs and Census Areas

Alaska is made up of 19 boroughs (including the Unorganized Borough) and 11 census areas. Each is unique in geography, history, resources and demographic composition, and thus subject to differing social, economic and environmental catalysts. As a result, population trends can be expected to vary. ADOLWD has grouped the boroughs and census areas into six regions to better monitor and report demographic and economic trends. The regions are: Southeast, Anchorage/Mat-Su, Gulf Coast, Interior, Northern, Southeast, and Southwest Alaska.

The authors looked at the population estimates for Alaska seniors (65 and older) by borough/census area and by ADOLWD-defined economic regions, which are summarized in Table 5 on page 18. (Detailed tables appear in Appendix 3). As expected, large boroughs and census areas that include rural hub communities are home to the largest numbers of seniors, and their growth is more significant in raw numbers than smaller boroughs/census areas that may expect a higher percentage change in their senior population. For example, in Southwest Alaska, the Aleutians West Census Area shows a change of more than 320 percent from 2010-2030, but the projected change in the number of seniors is only just under 500. At the same

time, the Bethel Census Area shows a growth of about 94 percent in its senior population, but this translates to almost 1,000 seniors.

In terms of actual numbers of seniors, the biggest increase by 2030 will be in the Anchorage/Mat-Su Region (+13,322), followed by the Interior Region (+11,368). The Southeast Region shows the smallest expected increase in seniors with a gain of 2,482. At the borough/census area level, the largest increases are expected in the Mat-Su Borough, Fairbanks North Star Borough and the Kenai Peninsula Borough. The smallest gains are projected for Yakutat Borough and the Bristol Bay Borough, each with an expected increase of less than 100 seniors.

The data available for analysis does not take into account recent boundary or geographic designations and changes. For example, the Skagway Borough remains grouped with the Skagway-Hoonah-Angoon census area for analysis purposes.

## Veterans

The U.S. armed forces have helped shape the modern history of Alaska, and the military still plays a substantial role in federal investments in the state — in infrastructure, funding and personnel. Alaska's geographic location makes it a strategic position for national security. As a consequence of the flow of military personnel to and through Alaska, a significant number of veterans and their families have put down roots in the state.

The U.S. Department of Veteran Affairs (VA) has estimated that the presence of veterans age 65 and older will continue to grow throughout the next couple decades. While the VA data depict a continued increase in senior veterans, it is important to note that the methodology, source and assumptions behind the VA projections are quite different from those used by ADOLWD in generating population estimates. Use caution in comparing or correlating different sets of data with one another.

The VA's estimates for veterans age 65 and older expected to be living in Alaska over the next several decades are included at the end of Appendix 3. These estimates have been broken out by borough/census area and region by the authors for the purposes of this report. However, no attempt has been made to adjust VA estimates in order to reconcile them with ADOLWD methodology or assumptions. A further word of caution applies here: demographers at ADOLWD routinely note the relative unpredictability of military population forecasts due to the influence of unforeseeable national and international events.

Table 5: Projected change in senior population (age 65+) by place, 2010-2030

Region	Borough /Census Area	Population Projection					Percent Change				
		2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30	2010-30
<b>Anc/Mat-Su</b>	Anchorage Municipality, AK	22,284	30,806	40,821	50,171	56,206	38.2%	32.5%	22.9%	12.0%	152.2%
	Matanuska-Susitna Borough, AK	6,581	9,052	12,543	16,055	18,906	37.5%	38.6%	28.0%	17.8%	187.3%
	<b>Mat-Su Region Total Est.</b>	<b>28,865</b>	<b>39,858</b>	<b>53,364</b>	<b>66,226</b>	<b>75,112</b>	<b>38.1%</b>	<b>33.9%</b>	<b>24.1%</b>	<b>13.4%</b>	<b>160.2%</b>
<b>Southeast</b>	Haines Borough, AK	324	429	514	565	572	32.4%	19.8%	9.9%	1.2%	76.5%
	Juneau City and Borough, AK	2,812	3,968	5,289	6,195	6,759	41.1%	33.3%	17.1%	9.1%	140.4%
	Ketchikan Gateway Borough, AK	1,436	1,804	2,222	2,580	2,685	25.6%	23.2%	16.1%	4.1%	87.0%
	Prince of Wales-Outer Ketchikan CA, AK	600	739	935	1,056	1,098	23.2%	26.5%	12.9%	4.0%	83.0%
	Sitka City and Borough, AK	1,050	1,261	1,475	1,702	1,758	20.1%	17.0%	15.4%	3.3%	67.4%
	Skagway-Hoonah-Angoon Census Area, AK*	359	485	614	686	691	35.1%	26.6%	11.7%	0.7%	92.5%
	Wrangell-Petersburg Census Area, AK**	797	948	1,111	1,270	1,282	18.9%	17.2%	14.3%	0.9%	60.9%
	Yakutat City and Borough, AK	59	78	106	114	124	24.4%	26.4%	7.0%	8.1%	110.2%
<b>Southeast Region Total Est.</b>	<b>7,437</b>	<b>9,712</b>	<b>12,266</b>	<b>14,168</b>	<b>14,969</b>	<b>30.6%</b>	<b>26.3%</b>	<b>15.5%</b>	<b>5.7%</b>	<b>101.3%</b>	
<b>Gulf Coast</b>	Kenai Peninsula Borough, AK	5,775	7,722	10,201	12,192	13,084	33.7%	32.1%	19.5%	7.3%	126.6%
	Kodiak Island Borough, AK	950	1,344	1,732	2,143	2,451	41.5%	28.9%	23.7%	14.4%	158.0%
	Valdez-Cordova Census Area, AK	885	1,193	1,603	1,901	1,999	34.8%	34.4%	18.6%	5.2%	125.9%
	<b>Gulf Coast Region Total Est.</b>	<b>7,610</b>	<b>10,259</b>	<b>13,536</b>	<b>16,236</b>	<b>17,534</b>	<b>34.8%</b>	<b>31.9%</b>	<b>19.9%</b>	<b>8.0%</b>	<b>130.4%</b>
<b>Interior</b>	Denali Borough, AK	149	204	312	370	392	36.9%	52.9%	18.6%	5.9%	163.1%
	Fairbanks North Star Borough, AK	6,185	8,695	11,709	14,285	16,082	40.6%	34.7%	22.0%	12.6%	160.0%
	Southeast Fairbanks Census Area, AK	748	981	1,247	1,455	1,537	31.1%	27.1%	16.7%	5.6%	105.5%
	Yukon-Koyukuk Census Area, AK	557	697	831	961	996	25.1%	19.2%	15.6%	3.6%	78.8%
	<b>Interior Region Total Est.</b>	<b>7,639</b>	<b>10,577</b>	<b>14,099</b>	<b>17,071</b>	<b>19,007</b>	<b>38.5%</b>	<b>33.3%</b>	<b>21.1%</b>	<b>11.3%</b>	<b>148.8%</b>
<b>Southwest</b>	Aleutians East Borough, AK	88	126	134	180	238	43.2%	6.3%	34.3%	32.2%	170.5%
	Aleutians West Census Area, AK	153	237	372	515	648	54.9%	57.0%	38.4%	25.8%	323.5%
	Bethel Census Area, AK	1,059	1,258	1,518	1,790	2,056	18.8%	20.7%	17.9%	14.9%	94.1%
	Bristol Bay Borough, AK	90	104	129	178	181	15.6%	24.0%	38.0%	1.7%	101.1%
	Dillingham Census Area, AK	358	420	539	652	735	17.3%	28.3%	21.0%	12.7%	105.3%
	Lake and Peninsula Borough, AK	137	169	192	244	267	23.4%	13.6%	27.1%	9.4%	94.9%
	Wade Hampton Census Area, AK	412	450	496	582	654	9.2%	10.2%	17.3%	12.4%	58.7%
	<b>Southwest Region Total Est.</b>	<b>2,297</b>	<b>2,764</b>	<b>3,380</b>	<b>4,141</b>	<b>4,779</b>	<b>20.3%</b>	<b>22.3%</b>	<b>22.5%</b>	<b>15.4%</b>	<b>108.1%</b>
<b>Northern</b>	Nome Census Area, AK	619	760	959	1,126	1,213	22.8%	26.2%	17.4%	7.7%	96.0%
	North Slope Borough, AK	419	532	704	879	986	27.0%	32.3%	24.9%	12.2%	135.3%
	Northwest Arctic Borough, AK	438	518	594	699	791	18.3%	14.7%	17.7%	13.2%	80.6%
	<b>Northern Region Total Est.</b>	<b>1,476</b>	<b>1,810</b>	<b>2,257</b>	<b>2,704</b>	<b>2,990</b>	<b>22.6%</b>	<b>24.7%</b>	<b>19.8%</b>	<b>10.6%</b>	<b>102.6%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

# Assisted Living & the Continuum of Care

The last 20 years have brought great change to the services available to seniors and to the expectations seniors have for how and where they live as they age. There was a time in Alaska, not that long ago, when seniors had two options: Pioneer Homes if they needed support in accomplishing the routine tasks of daily living, and nursing homes if they also required medical support.

As the Alaska population grew, and the number of beds available in nursing homes and Pioneer Homes remained relatively static, a system of community-based senior support services grew. Federal nutrition, transportation and support services, senior centers, assisted living homes, personal care services, advocacy, and information and referral services can now be found in urban and rural areas of the state. These services allow seniors to continue living in their communities and relieve the pressure on nursing homes and Pioneer Homes to serve everyone.

The Alaska Commission on Aging describes the continuum of care for seniors as a system of services that begins with *Community Based Services*, such as congregate meals and public transportation, and extends to *Most Intensive Institutional Services*, including nursing homes and hospice care. Each level of care plays a critical role in supporting and providing care to seniors as they move from independence to dependent care.

Changes in funding or availability of any service in the continuum can impact other services. For example, reducing the availability of personal care assistants (PCAs), who provide seniors with in-home care, will increase demand for facility-based services like assisted living homes, including Pioneer Homes. Reducing the availability of Pioneer Home beds will increase the number of Alaskans needing nursing care services. Small changes at any point in the continuum can ripple out, affecting the lives of seniors and their families.

## Assisted Living Homes

Once elders can no longer live in their homes, many move to assisted living homes or nursing homes. In June 2009, there were 2,007 licensed assisted living beds in Alaska. They range from small, privately owned “Mom and Pop” homes (usually around five beds), to homes operated by nonprofits that range in size from five to 65 beds, to the state-administered Pioneer Homes, which have 508 of the licensed beds and range in size from 45 licensed beds (Juneau and Ketchikan) to 168 beds (Anchorage Pioneer Home).

Figure 3: Alaska Commission on Aging Continuum of Care

Community-Based Services	Home-Based Services	Intensive Home and Community-Based Services	Services in a Residential Care Setting	Most Intensive Institutional Services
* Congregate Meals	* Home Delivered Meals	* Adult Day Services	* Assisted Living	* Acute Care
* Public Transportation	* Assisted Transportation	* In-Home Respite Care	* Facility Respite Care	* Nursing Home Care
* Information/Referral/Personal Advocacy	* Shopping Assistance	* Home Health Care	* Pioneers' Home	* Residential Hospice Care
* Physical Fitness	* Congregate Housing	* Personal Care	* Adult Foster Care	
* Health Promotion/Disease Prevention Classes & Activities	* Supported Housing	* Hospice Care		
* Senior Employment Services	* Home Repair & Renovation	* Family Caregiver Support		
* Independent Living	* Senior Companion Volunteers	* Outpatient Care		
* Senior Centers	* Homemaker/Chore Service	* Rehabilitation		
* Senior Volunteer Programs	* Companion Programs	* Counseling		
* Legal Services		Long Term Care Ombudsman: Advocacy for Residents of Long Term Care Facilities		
* Health Screening		Care Coordination (Case Management): Personal Assessment/Plan of Care/Follow-Up		
* Social & Recreational Activities		Adult Protective Services: Investigation and Services to Abuse/Neglect Victims		

The Alaska Commission on Aging lists the Pioneer Homes as *Services in a Residential Care Setting*, along with private sector assisted living homes, facility-based respite care and adult foster care. The Pioneer Homes are licensed as assisted living homes.

Assisted living homes are located primarily in larger communities with highway and/or ferry access. Statewide there are only four assisted living homes in frontier communities only accessible by air: Dillingham, Barrow, Tanana and Kotzebue. Three of these communities function as a hub for transportation, social services and commerce in their respective regions and the fourth, Tanana, developed the assisted living home when the USPH Tanana Hospital closed in 1982. As Table 6 shows, there are licensed assisted living beds in all regions of the state, but Pioneer Homes in only three. Pioneer Homes represent 16.5 percent of all assisted living beds in the Anchorage/Mat-Su Region, 51.1 percent in the Interior, and 84.7 percent in Southeast. In all, approximately one quarter (24.5 percent) of Alaska’s assisted living beds are currently in Pioneer Homes.

**Table 6: Percent of Pioneer Home beds by region, June 2009**

Region	Pioneer Home Beds	Other Assisted Living Beds	Total Assisted Living Beds	Percent Pioneer Home Beds
Anchorage/Mat-Su	247	1,235	<b>1,482</b>	16.7%
Gulf Coast	0	167	<b>167</b>	0.0%
Interior	93	89	<b>182</b>	51.1%
Northern	0	32	<b>32</b>	0.0%
Southeast	168	31	<b>199</b>	84.4%
Southwest	0	15	<b>15</b>	0.0%
<b>Total</b>	<b>508</b>	<b>1,569</b>	<b>2,077</b>	<b>24.5%</b>

Source: Alaska Department of Health and Social Services, Division of Public Health, Certification and Licensing, Assisted Living Home List, June 2009.

## Challenges for the Future

In its 2008-2011 State Plan, the Alaska Commission on Aging notes a number of challenges on the horizon for seniors and senior services. These include income insecurity, changes to health care financing, the future of a full continuum of care, and energy and utility costs. Two issues that particularly impact Pioneer Homes are the availability of a trained workforce and the behavioral health needs of seniors.

**Workforce:** One of the greatest challenges facing current and future senior services is assuring the availability of a trained healthcare workforce, especially registered nurses (RNs) and certified nursing assistants (CNAs).

National and state trends illustrate the increasing need for senior services as the Baby Boom population reaches retirement age and beyond. On both levels, the data shows increasing and continuing demand for RNs and CNAs. In Alaska, the demand continues to outpace supply. For Pioneer Homes, this means that it competes with private sector service providers to hire and retained RNs and CNAs; competition

factors include salary, benefits, opportunity for career advancement and overall work culture/environment.

### Employment Data

Recent employment data show that the current national economic climate is affecting Alaska and Alaskan jobs, but the impacts are not as deep as in the Lower 48. The state’s healthcare industry remains relatively healthy. Preliminary employment data from June 2009 show healthcare jobs in Alaska total 28,200; this 100 jobs less than May 2009, but still 1,100 jobs more than a year ago.

Population trends indicate demand for healthcare services will rise as the Alaska population ages, fueling growth in the state’s healthcare industry. Alaska’s population projections for the ten-year period ending in 2016 predict a roughly 75 percent increase in Alaska’s senior population from about 45,000 to 79,000 people. Over the same period, state employment projections foresee almost a 25 percent growth in healthcare employment, as shown in Table 7.

**Table 7: Alaska Health Care and Social Assistance employment forecast, 2006-2016**

	<b>2006 Employment (Estimated)</b>	<b>2016 Projected Employment</b>	<b>Change 2006- 2016</b>	<b>Percent Change 2006- 2016</b>
Ambulatory Services	14,450	18,450	4,000	27.4%
Hospitals	11,800	14,850	3,050	25.8%
Total Industry	37,400	46,650	9,250	24.8%

Note: Total includes all jobs in the Health Care and Social Assistance, Public & Private sector, as defined by ADOLWD, including public sector hospitals. Numbers may not total due to rounding.  
Source: Alaska Department of Labor and Workforce Development

### Growth in Direct Care Occupations

Following national trends, the Alaska Department of Labor and Workforce Development assumes that some of the growing need for senior services will be filled by direct care workers – individuals who provide hands-on care and personal assistance for the elderly and disabled as well as for those living with acute (short term) and chronic (long term) medical conditions.

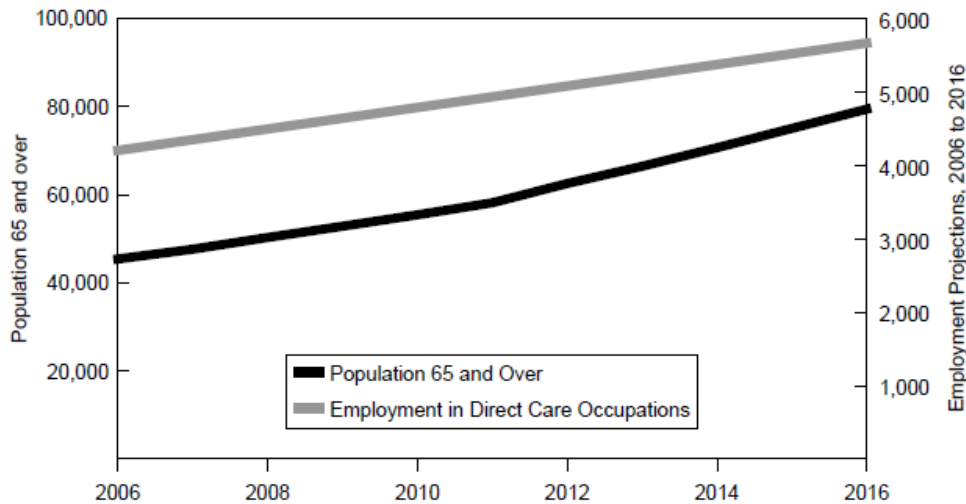
In a June 2009 report, ADOLWD identified two direct care occupations (home health aides and personal home care aides) as being among the 10-fastest growing occupations in the state. Home health aide jobs are projected to grow 35.3 percent over the 2006 to 2016 period, and positions for personal home care aides are expected to grow 34.6 percent. Nationally, employment for home health aides and personal home care aides is projected to grow at 48.7 percent and 50.6 percent respectively over the same period

In Alaska, ADOLWD predicts that one out of every 30 new jobs will be in these two direct care occupations. Job openings for direct care workers are expected to make up 3.3 percent of the total projected growth for all occupations (1,465 job openings) from 2006 to 2016. Nationally over the same period, one in 20 new jobs is expected

to be in direct care occupations — five percent of the total projected growth for all occupations in the U.S. — roughly 770,000 job openings nationwide.

Figure 4 shows the parallel trend line between the direct care occupation forecast and the senior population forecast for Alaska.

**Figure 4: Industry employment vs. senior population trends, 2006-2016**



Source: Alaska Department of Labor and Workforce Development

The Alaska Department of Labor and Workforce Development also looks at wages for direct care occupations. The Alaska median hourly wage in May 2008 for home health aides was \$13.72 and for personal home care aides, \$12.55. Although those wages are lower than Alaska’s median wage for all occupations (\$18.84), they are still higher than the median wage for more than 50 other reported occupations in Alaska. When compared to median wages for other states, Alaska wages for direct care workers are the highest in the country.

**Addressing Nursing and CNA Shortages**

Expected retirements will greatly increase the need for nurses in Alaska. The vacancy rate for nurses in Alaska stayed about the same from 2004 to 2006, even with additional new graduates. According to the UAA School of Nursing, it was only at the beginning of addressing the state’s nursing shortage in 2006 and 2007.

The School of Nursing reports it has doubled its numbers since 2002, and applicant interest continues to be high. The school expanded its program by establishing program sites across the state and using a blended delivery model with on-line and video-conference didactic and on-site clinical instruction. The Nursing School graduates between 185 and 205 students per year. This number is then eligible to take the certification exam. In order for the school to be in compliance with the National League for Nursing Accreditation Commission (NLNAC), 80 percent of graduates must pass the examinations, the actual passing rate tends to exceed the

80 percent. An estimated 93 percent of graduates from the Nursing School will likely stay in Alaska.

The school anticipates that the market will continue to absorb its graduates. In order to determine the number of students that can be absorbed into the Alaska workforce, the School of Nursing monitors the market closely using relevant available information such as ADOLWD data, vacancy studies and receives information from the Nursing Education Advisory Council, which is made up of industry and workplace representatives including hospitals and other service providers. Currently, the School of Nursing is planning to add capacity and faculty to its Associate of Applied Science program.

The School of Nursing is an essential part of providing highly skilled healthcare professionals into the state's labor pool. However, the school does face challenges in the future, as its nursing faculty, which has an average age of 55, also reaches retirement age. Challenges such as instructor shortages funding, and distribution of graduates (there may be a risk of saturating urban markets and facing nursing gaps elsewhere) could affect hospitals, Pioneer Homes and other service providers in the future.

In addition to the challenge of operating in a market environment where demand out paces supply for nurses and CNAs, the Pioneer Homes also face the challenge of how to attract and retain nurses and CNAs. Current salaries and benefits offered by the State of Alaska personnel system generally fall short from those in the private sector. In addition, the State does not have career paths or ladders for CNAs that encourage them to stay and build a career in the field at Pioneer Homes. Anecdotal reports indicate that Nursing School graduates tend to gravitate toward working in hospitals rather than retirement homes even though many student do receive exposure to Pioneer Homes in the course of their education.

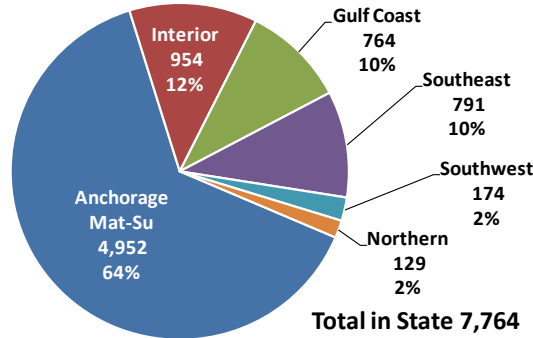
#### **Current Nurses and Nursing Aides in Alaska**

The Department of Commerce, Community and Economic Development, Division of Corporations, Business and Professional Licensing maintains a database of licensed professionals. The Division provides a listing of all persons in the state holding an active/valid nursing and CNA license. The authors downloaded the database listing in June 2009 for analysis. Records for current nursing licensees and provisional licensees are included in the data set as well as those for certified nurse aides. Incomplete records, duplicates and out-of-state records were excluded from analysis. Both data sets were then grouped by place, borough/census areas and region. Licensees are reported by their address at the time they received licensing; the database does not provide information on where licensees are currently working.

**Nurses:** The pie chart in Figure 5 shows that of the 7,764 licensed/provisional nurses in Alaska, 64 percent where living in the Anchorage/Mat-Su region at the

time of licensing, followed by 12 percent in the Interior, and an equal breakout between the Southwest and Gulf Coast Regions, each at 10 percent

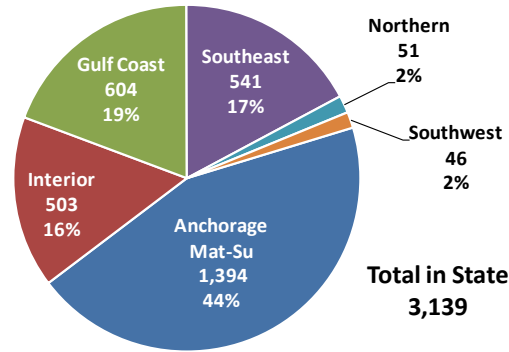
**Figure 5: Licensed/provisional nurses in Alaska by region**



Source: Occupational licensing database, June 2009

**Certified Nursing Aides:** Pioneer Home administrators say that, in most communities, there are an adequate number of certified nursing aides being trained. In fact, many CNA students do internships or work at Pioneer Homes during their CNA training. However, many CNAs move on after training to local hospitals, nursing homes or private primary care providers where work schedules are more attractive and pay is generally better.

**Figure 6: Licensed/provisional CNAs in Alaska by region**



Source: Occupational licensing database, June 2009

Certified nursing aide license data show there are approximately 3,139 CNAs in Alaska — less than half the number of nurses in the state. The regional mix is notably different from that for nurses, with CNAs making up a smaller percentage of the Anchorage/Mat-Su region (44 percent) and having a larger presence in the Gulf Coast, Southeast and Interior regions (19 percent, 17 percent and 16 percent respectively) compared with licensed or provisional nurses.

**Behavioral Health Issues:** While developing its 2008-2011 State Plan, the Alaska Commission on Aging conducted focus groups with seniors and providers to discuss

availability and gaps in senior services. Focus group participants identified the following behavioral health issues that impact Alaska's seniors:

- There is a lack of mental health and substance abuse treatment services; (other than emergency rooms) services are not available in most communities.
- There are increasing numbers of seniors with depression, bipolar disorder, and other mental illnesses.
- Substance abuse problems are going undiagnosed and untreated.
- Assisted living facilities are being overwhelmed by the needs of residents with substance abuse problems and psychiatric disorders
- An increasing number of chronically mental ill seniors with dementia cannot find assisted living care, as those homes licensed and equipped to serve the mentally ill are not able to handle dementia and homes licensed and prepared to deal with dementia are not equipped to deal with mental illness.
- In-home behavioral health services especially for seniors are unavailable.
- Primary care providers often fail to identify mental health and substance abuse problems among their older patients.
- Seniors often inadvertently combine conflicting medications.
- The younger senior population is exhibiting a growing tendency to visit multiple physicians and pharmacies for pain-killers, sleeping pills, and other potent prescription medications.

Assisted living homes in the United States are seeing an increase in the number of residents with Alzheimer's Disease and Related Dementias (ADRD) and chronic mental illnesses. The Pioneer Homes have worked hard to develop a model of care able to provide support to seniors experiencing the slow loss of intellectual, emotional and behavioral abilities related to ADRD. The Pioneer Homes are recognized as a leader in Alaska in the residential care of seniors with ADRD.

Many Pioneer Home residents also have one or more chronic mental illnesses (CMI). Among seniors, mental illness is often viewed as a fault or shortcoming. The American Association for Geriatrics and Psychiatry reports that nearly 20 percent of the U.S. population aged 55 years and older has a mental disorder that is not part of the normal aging process. However, Americans 65 and older are less likely than younger people to seek out mental health services. This age group, currently 12.6 percent of the population, makes up seven percent of those in inpatient mental health services, six percent in community mental health services, and nine percent of those in private psychiatric care. Most seniors seek treatment through their primary care provider. Older men are far less likely to seek and receive treatment than older women. The result is that many older Americans are coming to assisted living homes with undiagnosed or untreated mental illnesses or develop mental illnesses while aging in place in these homes and do not seek treatment.

This assumption is supported by a 2000 survey (Deborah Wagenaar, et.al) of Michigan assisted living home administrators about the prevalence of mental health

problems among their residents and how the problems were being addressed. They found the greatest barriers to obtaining necessary mental health services are patient and family attitudes. The administrators also reported that primary care physicians were the most common provider of mental health care to assisted living home residents, followed by psychiatrists, community mental health agencies, private therapists and friends. Physical violence and aggression were reported to be the most common reasons for refusal of admission and discharge.

In 2004, one of the few comparative studies of the mental health of assisted living residents was conducted in 193 assisted living homes in Florida, Maryland, New Jersey and North Carolina (Gruber-Baldini, et al). The researchers found 34 percent of residents had behavioral symptoms, and 13 percent exhibited some form of aggression. The most predictive behavioral symptoms for physical aggression are diagnoses of depression or psychosis and the level of cognitive impairment. The prevalence of physical aggression increases as cognitive impairment increases.

**Table 8: Prevalence of behavioral symptoms in residential care/assisted living residents**

<b>Behavioral Symptom (Cohen-Mansfield agitation inventory items)</b>	<b>Percent of Sample</b>
Any behavioral symptoms (≥ weekly)	34%
Any aggression	13%
Cursing, verbal aggression	12%
Hitting, kicking, pushing, biting, scratching, aggressive spitting	6%
Grabbing people, throwing things, tearing things, or destroying property	5%
Other aggressive behavior or self abuse	3%

Source: Behavioral Symptoms in Residential Care/Assisted Living Facilities: Prevalence, Risk Factors, Medication Management, Ann L. Gruber-Baldoni, et.al., Journal of the American Geriatric Society, October 2004.

Pioneer Homes are having some success caring for residents with chronic mental illnesses. The Eden Alternative approach has proven effective in meeting the needs of many residents with depression, anxiety disorders, etc. However, residents with CMIs or organic brain diseases like ADRD can be unpredictable and sometimes combative or assaultive. The number of residents who are combative is relatively small, though their impact on the Pioneer Homes is great due to the need for additional staffing to keep the resident, other residents and staff safe.

The incident reports for four Pioneer Homes (Anchorage, Fairbanks, Palmer and Sitka) show that 81 residents physically assaulted staff or other residents at least once over two years (June 2007 to June 2009). Nearly half the residents reported for physical assaults had only one incident over the two years. However, 13 residents were responsible for six or more physical assaults each, including one resident who recorded 21 assaults of staff and residents. The most common diagnoses for those with the most assaults was Alzheimer’s disease and/or dementia. Some also had depression, anxiety or mood disorders. Two of the residents with six or more assaults had no mental health diagnosis.

**Table 9: Physical assault incidents in four Pioneer Homes, 2007- 2009**

Number of Incidents	Number of Residents	Most Common Diagnoses
More than 10	4	Alzheimer’s disease or dementia, two with co-occurring disorders (anxiety state and mood disorder). One had no mental health diagnosis.
6 - 10	9	Alzheimer’s disease or dementia, co-occurring depression, brain injury. One had no mental health diagnosis.
4 - 5	5	Alcohol dependence/dementia, Alzheimer’s disease or dementia,.
3	5	Alzheimer’s disease or dementia, combinations of disorders, including depressive, anxiety and bipolar disorders.
2	17	Alzheimer’s disease or dementia, other mental disorders, no mental health diagnosis.
1	41	Most had some combination of Alzheimer’s disease/dementia and/or co-occurring mental health disorders. Six had no mental health diagnosis.
<b>Total</b>	<b>81</b>	

Note: Assault data was only available for four of the six Pioneer Homes, and, therefore, does not fully represent all incidents/assaults. Source: Incident reports for Pioneer Homes in Anchorage, Fairbanks, Palmer and Sitka, June 2007-June 2009.

Like dementia, chronic mental illnesses often make it impossible for an elder to remain in his or her home. Although Pioneer Homes are not licensed currently to provide care for chronically mentally ill individuals, they often find themselves with residents who have undiagnosed CMI or who develop-age related mental illness after admission. The key question is how Pioneer Homes can most effectively provide care for these residents, especially those seniors who are disruptive or aggressive and may provide a risk to staff or other patients. There are many suggestions for alternative treatment and care for seniors who endanger themselves or others, ranging from Pioneer Homes that specialize in providing care to CMIs, much like they did for ADRD, to improving screening admission to exclude individuals with a chronic mental illness.

Suggestions from Pioneer Home administrators include sending residents to API, building a specialized facility in Anchorage, having regional facilities, or using small Green House-like units attached to existing Pioneer Homes. This is a growing problem that is not something the Pioneer Homes can address alone. Nursing homes and community-based assisted living homes are also dealing with residents who are a danger to themselves or others, disrupt and upset other residents or patients, and require higher levels of staffing. Most importantly, strategies should be developed to get seniors into mental health and substance abuse treatment so their issues can be addressed before they need residential care.

## Current Residents & Services

Since 1913, the Alaska Pioneer Homes have provided support and care to Alaska seniors. The first Pioneer Home was opened in Sitka in 1913 as a home for indigent men. The current Sitka Pioneer Home was built in 1934; women were admitted for the first time in 1950. In subsequent years, five more Pioneer Homes opened in Anchorage, Fairbanks, Ketchikan, Juneau and the Mat-Su Valley.

**Table 10: Pioneer Homes Licensed Beds, June 2009**

Pioneer Homes	Licensed Beds	Year Built
Sitka Pioneer Home	75	1913*
Fairbanks Pioneer Home	93	1967
Alaska Veterans & Pioneer Home in Palmer	79	1971
Ketchikan Pioneer Home	48	1981
Anchorage Pioneer Home	168	1982
Juneau Pioneer Home	45	1988
<b>Total Licensed Beds</b>	<b>508</b>	

\*Replaced in 1934

Originally established to provide a place for “sourdoughs,” miners and homesteaders to live as they aged, the Pioneer Homes have developed into long term care facilities providing a wide range of services to seniors with needs ranging from help with meals and daily living activities, to seniors requiring hands-on assistance with most activities. In recent years, increased focus has been placed on caring for residents with ADRD and on palliative care, the goal of which is to provide comfort and maintain the highest possible quality of life for residents in their final days.

**Waitlists:** An Alaskan must be 65 years old in order to qualify for admission at a Pioneer Home. Many people apply to get on the waitlist as soon as they reach 65 — first on the inactive wait list, and then the active waitlist when they are ready to move into a Pioneer Home. In April 2009, there were 434 people on the active wait list and 5,316 on the inactive list. Seniors can be on the wait list for more than one Pioneer Home. There were 2,934 unduplicated applicants on the wait lists in April 2009, including 290 on the active wait list and 2,644 on the inactive list.

**Table 11: Wait list by Pioneer Home, April 2009**

Pioneer Home	Active Wait List	Inactive Wait List
Anchorage	133	1,276
Fairbanks	85	996
Juneau	56	906
Ketchikan	37	486
Palmer	117	956
Sitka	6	696
<b>All Pioneer Homes</b>	<b>434</b>	<b>5,316</b>

**Size and Occupancy:** Pioneer Homes range in size from 168 available beds (Anchorage) to 45 beds (Juneau). Each Pioneer Home generally has a few licensed beds that are unavailable due to renovations or other facility issues. In April 2009, occupancy rates for available beds ranged from 97.0 percent in Anchorage to 81.9 percent in Sitka.

**Table 12: Occupancy by Pioneer Home, April 2009**

	Available Beds	Occupied Beds	Percent Occupied
Anchorage	168	163	97.0%
Fairbanks	93	82	88.2%
Juneau	45	42	93.3%
Ketchikan	47	40	85.1%
Palmer	79	72	91.1%
Sitka	72	59	81.9%
<b>All Pioneer Homes</b>	<b>504</b>	<b>458</b>	<b>90.9%</b>

**Age of Residents:** In June, there were 459 seniors living in Pioneer Homes, more than half (54 percent) of whom were 85 years or older. The Fairbanks Pioneer Home has the highest percentage (72 percent) of residents 85 and older, and the Sitka Pioneer Home has the lowest (26 percent). More than a third of residents at the Fairbanks, Juneau and Ketchikan Homes are 90 years old or older.

**Table 13: Age of residents by Pioneer Home, June 2009**

Pioneer Home	65-69	70-74	75-79	80-84	85-89	90+	Unknown
Anchorage	4	9	20	50	42	39	0
Fairbanks	1	3	5	15	30	30	0
Juneau	0	4	2	9	12	16	0
Ketchikan	1	4	4	9	4	14	4
Palmer	1	2	6	16	23	22	0
Sitka	4	10	12	17	11	4	0
<b>All Pioneer Homes</b>	<b>11</b>	<b>32</b>	<b>49</b>	<b>116</b>	<b>122</b>	<b>125</b>	<b>4</b>

**Table 14: Percent of residents by age by Pioneer Home, June 2009**

Pioneer Home	65-69	70-74	75-79	80-84	85-89	90+	Unknown
Anchorage	2%	5%	12%	30%	26%	24%	0%
Fairbanks	1%	4%	6%	18%	36%	36%	0%
Juneau	0%	9%	5%	21%	28%	37%	0%
Ketchikan	3%	10%	10%	23%	10%	35%	10%
Palmer	1%	3%	9%	23%	33%	31%	0%
Sitka	7%	17%	21%	29%	19%	7%	0%
<b>All Pioneer Homes</b>	<b>2%</b>	<b>7%</b>	<b>11%</b>	<b>25%</b>	<b>27%</b>	<b>27%</b>	<b>1%</b>

**Length of Stay:** More than half the residents of Pioneer Homes have been there for less than three years. One in 10 residents at the Anchorage Pioneer Home and 17 percent at the Fairbanks Pioneer Home have been in residence for 10 or more years.

**Table 15: Length of stay by Pioneer Home, June 2009**

	< 1 year	1-2 years	3 to 4 years	5 to 6 years	7 to 9 years	10+ years	Unknown
Anchorage	26	62	39	12	8	17	0
Fairbanks	18	22	15	14	5	10	0
Juneau	10	18	6	6	1	2	0
Ketchikan	7	13	7	5	3	2	3
Palmer	10	30	7	12	7	4	0
Sitka	11	18	7	7	10	5	0
<b>All Pioneer Homes</b>	<b>82</b>	<b>163</b>	<b>81</b>	<b>56</b>	<b>34</b>	<b>40</b>	<b>3</b>

**Table 16: Percent of residents by length of stay by Pioneer Home, June 2009**

	< 1 year	1 to 2 years	3 to 4 years	5 to 6 years	7 to 9 years	10+ years	Unknown
Anchorage	16%	38%	24%	7%	5%	10%	0%
Fairbanks	21%	26%	18%	17%	6%	12%	0%
Juneau	23%	42%	14%	14%	2%	5%	0%
Ketchikan	18%	33%	18%	13%	8%	5%	8%
Palmer	14%	43%	10%	17%	10%	6%	0%
Sitka	19%	31%	12%	12%	17%	9%	0%
<b>All Pioneer Homes</b>	<b>18%</b>	<b>36%</b>	<b>18%</b>	<b>12%</b>	<b>7%</b>	<b>9%</b>	<b>1%</b>

**Payment Source:** Cost of resident care is paid for in one of three ways: Half of all residents and/or their families directly pay for their care; 19 percent are admitted on the Project CHOICE Medicaid Waiver; and payment assistance is provided by the State for 31 percent of the residents. The Fairbanks Pioneer Home has the highest percentage of private pay residents (61 percent). The Palmer Home has the highest percentage of Medicaid Waiver residents (29 percent), and the Ketchikan Pioneer Home has the highest percentage of residents receiving state payment assistance.

**Table 17: Payment source by Pioneer Home, June 2009**

Pioneer Home	Private Pay		Medicaid Waiver		Payment Assistance	
	Number of Residents	Percent of Residents	Number of Residents	Percent of Residents	Number of Residents	Percent of Residents
Anchorage	81	50%	27	17%	55	34%
Fairbanks	52	61%	11	13%	22	26%
Juneau	22	52%	7	17%	13	31%
Ketchikan	16	39%	9	22%	16	39%
Palmer	32	46%	20	29%	17	25%
Sitka	25	43%	14	24%	19	33%
<b>All Pioneer Homes</b>	<b>228</b>	<b>50%</b>	<b>88</b>	<b>19%</b>	<b>142</b>	<b>31%</b>

**Level of Care:** Each of the approximately 460 residents of the Pioneer Homes received a comprehensive assessment to identify support and healthcare needs. In the past, the majority of residents came to the Pioneer Homes needing Level I care. Now almost all residents are admitted needing Level II or III care.

Service levels are defined as follows:

- **Level I** services include the provision of housing, meals, emergency staff assistance with activities of daily living, medication administration, or assistance and opportunities for recreation. Level I services do not include health-related services, although the Pioneer Home pharmacy may supply prescribed medications.
- **Level II** services include the provision of housing, meals, and emergency assistance; plus staff assistance as stated in the resident’s assisted living plan, including assistance with activities of daily living, medication administration, recreation and health-related services. Assistance provided by a staff member includes supervision, reminders, and hands-on assistance, with the resident performing the majority of the effort. During the night shift, the resident is independent in performing activities of daily living and capable of self-supervision.
- **Level III** services include the provision of housing, meals, and emergency assistance; plus staff assistance as stated in the resident’s assisted living plan, including assistance with activities of daily living, medication administration, recreation, and health-related services; assistance provided by a staff member includes hands-on assistance, with the staff member performing the majority of the effort. The resident may receive assistance throughout a 24-hour day, including the provision of care in a transitional setting.

**Table 18: Residents by service level by Pioneer Home, June 2009**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Anchorage	38	48	78	<b>164</b>
Fairbanks	7	24	53	<b>84</b>
Juneau	1	13	29	<b>43</b>
Ketchikan	4	10	28	<b>42</b>
Palmer	5	14	52	<b>71</b>
Sitka	5	22	31	<b>58</b>
<b>All Pioneer Homes</b>	<b>60</b>	<b>131</b>	<b>271</b>	<b>462</b>

**Table 19: Bed occupancy by level of services by Pioneer Home, June 2009**

	<b>Level I</b>		<b>Level II</b>		<b>Level III</b>	
	<b>Available</b>	<b>Percent Occupied</b>	<b>Available</b>	<b>Percent Occupied</b>	<b>Available</b>	<b>Percent Occupied</b>
Anchorage	38	100.0%	48	100.0%	82	97.6%
Fairbanks	15	46.7%	25	96.0%	53	90.3%
Juneau	1	100.0%	13	100.0%	31	95.6%
Ketchikan	4	100.0%	12	83.3%	28	95.5%
Palmer	5	100.0%	19	73.7%	55	89.9%
Sitka	8	62.5%	29	75.9%	35	80.6%
<b>All Pioneer Homes</b>	<b>71</b>	<b>84.5%</b>	<b>146</b>	<b>89.7%</b>	<b>284</b>	<b>92.2%</b>



# Planning For Tomorrow

## OVERVIEW: Demand/Need for Services

While the increase in Alaska's senior population over the next 20 years is a certainty, the future need for Pioneer Home beds is less clear. Many factors could affect the demand or need for Pioneer Homes and other assisted living services:

- The availability of community-based services is critical for helping seniors stay in their homes. Reductions in these programs or caps on payment sources could result in more people needing assisted living services.
- Advances in assistive technology may make it possible for people to remain in their homes longer.
- Medical advances, including advances which slow the progression or, provide a cure for Alzheimer's disease, could reduce the need for assisted living.
- Changes in federal programs which pay for senior services in assisted living or community-based services, such as the Medicaid Waiver, would impact demand. Opening up the Medicaid Waiver program to all income groups would increase demand, while further restrictions, or the elimination of the program, would eliminate the only funding source for many seniors.
- Changes in State support will also impact the number of residents in Pioneer Homes. Greater funding support from the Alaska Legislature would allow Pioneer Homes to staff for higher levels of care and increase their capacity to achieve higher occupancy levels.
- And finally, the most important factor is the extent to which the Alaska Legislature supports the growth of the Pioneer Homes by investing in new or expanded facilities and increasing the number of beds to meet the state's burgeoning senior population.

Undoubtedly there will be the need for more assisted living beds in the future. The question is what role the State take in providing those services. The State could continue operating existing Pioneer Homes with no expansion. Another alternative would be privatization of the Pioneer Homes and getting out of the assisted living business. If it is decided that there should be an expansion of availability to meet the growing need for services, it will be necessary to construct new facilities to meet increasing demand.

Most current residents of Pioneer Homes are from the region where the facility is located. The Sitka Pioneer Home has a higher percentage of residents from other parts of the state because they are able to admit seniors more quickly due to a shorter active wait list.

An important consideration in looking at the future expansion of Pioneer Home services is the availability of private-sector assisted living homes and the possible substitution of private-sector care for Pioneer Home care. Pioneer Homes currently provide only one quarter (24.5 percent) of the licensed assisted living beds in Alaska, and they only provide care in three of six Alaska regions. Along with the rural tribal health corporations, private assisted living homes play an important role in providing residential care to Alaskan seniors.

It is interesting to note the differences in the proportion of assisted living beds provided by the Pioneer Homes in each region. Pioneer Homes make up only 16.5 percent of licensed assisted living beds in the Anchorage/Mat-Su region, 51.1 percent in the Interior, and 84.7 percent in Southeast Alaska. They are absent from the Gulf Coast, Southwest and Northern regions of the state.

**Table 20: Licensed assisted living homes, June 2009**

Region	2010 Est. Population Age 65+	Pioneer Home Beds	Other Assisted Living Beds	Total Assisted Living Beds	Percent Pioneer Home Beds	All Beds per 1,000 Age 65+
Anchorage/Mat-Su	28,865	247	1,235	<b>1,482</b>	16.7%	51.3
Gulf Coast	7,610	0	167	<b>167</b>	0.0%	21.9
Interior	7,639	93	89	<b>182</b>	51.1%	23.8
Northern	1,476	0	32	<b>32</b>	0.0%	21.7
Southeast	7,437	168	31	<b>199</b>	84.4%	26.8
Southwest	2,297	0	15	<b>15</b>	0.0%	6.5
<b>Total</b>	<b>55,324</b>	<b>508</b>	<b>1,569</b>	<b>2,077</b>	<b>24.5%</b>	<b>37.5</b>

Source: Alaska Department of Health and Social Services, Division of Public Health, Certification and Licensing, June, 2009. [www.hss.state.ak.us/dph/cl/ALL/](http://www.hss.state.ak.us/dph/cl/ALL/)

The per capita distribution of total assisted living beds by region is fairly consistent in the Gulf Coast, Interior, Northern, and Southeast regions, ranging from 21.7 beds per 1,000 seniors (people age 65 and older) in Northern Alaska to 27.2 in Southeast. Not surprisingly, the Anchorage/Mat-Su region has the most beds per 1,000 seniors (51.2), while the Southwest region, which includes Bethel, has the least (6.5 beds per 1,000 seniors). The need for assisted living beds in Bethel and other rural areas is addressed later in this section.

The Kenai Peninsula, where there are no Pioneer Home beds, has 155 licensed senior assisted living beds (37.3 beds per 1,000 seniors) spread throughout five communities on the peninsula. One of the state's most populated boroughs, the Kenai Peninsula Borough also has a number of nursing homes. While the borough may not need a standard Pioneer Home, a small Pioneer Home that specializes in the

care of seniors with ADRD would fill a gap in services between the nursing homes and community-based assisted living homes.

If the total number of Pioneer Home beds remains constant, the number of Level III beds will probably remain the same or continue to increase slowly as they have in the past. Currently the ability of Pioneer Homes to increase Level II and III residents is limited by funding for staffing, physical design attributes of the homes and, in the case of Anchorage, zoning requirements for the home. However, if the number of beds in the Pioneer Home system increases, the staffing should be increased in proportion to the overall bed mix to accommodate the increasing needs of Pioneer Home residents and demands for high-level care. In interviews for this study, almost all the Pioneer Home administrators talked about how growth in the number of Level III beds has made palliative care one of their main functions. In the future, it will be important to recognize palliative care as a part of the mission of Pioneer Homes and to communicate that to the public. Many still see the Pioneer Homes as retirement homes, rather than facilities that provide care to people with complex physical and mental health needs.

There are limiting factors to consider when looking at expanding services, including the location and condition of the current Pioneer Homes. The Ketchikan Home has limited possibilities for expanding its footprint by building anything more than a small new assisted living unit at its current location. Changes to the Sitka Pioneer Home can be difficult due to its certification as an historic building, and the Anchorage Pioneer Home is limited by zoning laws. Any increase in Pioneer Home beds in these locations will likely require building one or more new stand alone assisted living units.

## **LOCATION: Should Pioneer Homes Expand to Rural Areas?**

Alaska Native elders, particularly those living in frontier communities (rural communities without connection to a highway system), have historically been underserved in their local areas with the entire spectrum of long term care services (ANTHC, 2005), including both home and community-based services as well as facility-based services provided in nursing homes and assisted living homes.

The deficiencies in long term care facility-based services in frontier areas of the state are due to a number of factors. Rural frontier populations live in small isolated villages or subregional centers, which often lack an adequate demand or infrastructure to support residential care facilities. Even some larger regional hubs have small populations of seniors with varying needs that do not create a consistent demand for nursing home residential care. These smaller populations have not justified a need for a Pioneer Home based on the current model of care.

In many of these frontier communities, the Indian Health Service (IHS) has historically been the sole provider of health services. Responsibility for operation of IHS hospitals and health facilities in Alaska has transferred to the tribal health

organizations, which operate these services with funding from the IHS under self-determination contracts. Despite this transfer of management responsibility, the actual owner of hospital facilities continues to be the federal government. Across the nation the IHS does not provide any operational funding for long term care, including long term residential care. Despite the concerns of tribes over the need for long term care services, the IHS has actively resisted adding nursing home or assisted living services into its mission.

This IHS position has slowed the development of co-located nursing home facilities in federally owned hospitals in frontier regions of Alaska. This trend is in contrast to the practice in smaller rural communities in the Southeast and Gulf Coast regions of the state, where nursing homes operated by rural hospitals are not only common, but they form an essential portion of the revenue mix of successful rural (non-IHS) hospitals. The only nursing home in Northern and Southwest frontier areas of the state is Quyanna Care, which is co-located with the Nome Hospital. This facility is tribally operated, but it is not a federal facility and was not initially constructed or ever owned by IHS. The IHS is now constructing a replacement hospital in Nome, but the new IHS-owned facility does not include the long term care beds currently licensed in Quyanna Care, leaving in doubt the continuing operation of the Nome long term care facility.

In addition to the lack of nursing home alternatives for care of elders in frontier areas, these areas have also had little success developing and sustaining assisted living home facilities. No privately owned assisted living homes for seniors operate in the frontier communities of the Northern and Southwest regions. Assisted living homes operated by independent non-profit, tribal, or public entities have also had only limited success. Assisted living facilities in these areas have been able to sustain operations only when sources of additional revenue were provided by state-directed BRU grants (Kotzebue and Tanana Senior Centers), local government (North Slope Borough assisted living) or other larger more established non-profit health or housing agencies (Dillingham assisted living home).

Barriers to developing and sustaining assisted living facilities in frontier communities are due to variable demand caused by small populations, high costs of living, and inadequate reimbursement rates for Medicaid Waivers. Elders from remote areas also experience longer delays in obtaining the assessments required to qualify for the Medicaid Waivers that can help older Alaskans who are not income-eligible for Medicaid to pay for needed services. Elders in rural areas that need care but do not qualify for Medicaid generally have fewer private resources to pay for assisted living services. Many rural elders, especially Alaska Natives, have not been part of the cash economy and have few savings and no retirement pensions or Medicare income. All these barriers have threatened the sustainability of existing long term care services and prevented the successful development of new programs in frontier communities.

Table 21 shows the distribution of long term care beds in each of the six regions of Alaska, including beds in Pioneer Homes, other assisted living homes for seniors, and nursing home beds. Note the very low number of beds in Southwest and Northern Alaska, with only 15 long terms care beds to serve the entire Southwest region and only 47 beds to serve the Northern region. The final column shows the ratio of long term care (LTC) beds to seniors living in the region. This column shows that the regional supply in Anchorage/Mat-Su is ten times the supply of LTC beds per senior in the Southwest region. Looked at from a different perspective, the data indicate that the Southwest region of the state currently needs an additional 100 beds in long term care residential facilities to provide access to these services at the same rates as for seniors statewide.

**Table 21: Licensed long term care beds by region, 2009**

Region	Pioneer Home Beds	Other Assisted Living Beds	Nursing Home Beds	Total Long Term Care (LTC) Beds	2010 Est. Population Age 65+	LTC Beds per 1,000 Age 65+
Anchorage/Mat-Su	247	1,235	320	<b>1,796</b>	28,865	62.2
Gulf Coast	0	167	167	<b>334</b>	7,610	43.9
Interior	93	89	90	<b>272</b>	7,639	35.6
Northern	0	32	15	<b>47</b>	1,476	31.8
Southeast	168	31	122	<b>321</b>	7,437	43.2
Southwest	0	15	0	<b>15</b>	2,297	6.5
<b>Total</b>	<b>508</b>	<b>1,569</b>	<b>714</b>	<b>2,785</b>	<b>55,324</b>	<b>50.3</b>

Source: 2009 Pioneer Home data, 2009 DHSS licensing data, Medicare certification data 2009

Although the Southwest and Northern regions are the most underserved in the state for long term care services, these regions have small senior populations and the projected increase in both regions combined will account for only five percent of the statewide growth in the 65+ population over the next two decades.

In addition there is a current effort underway for development of a facility in Bethel (Southwest region) with a mix of assisted living and nursing home beds. The Maniilaq Association also has a long term care project in development that includes an 18-bed nursing home in Kotzebue, and Nome is in the early planning stage of replacing the beds to be closed in the Quyanna Care Center when a new IHS hospital is completed. The Alaska Native Tribal Health Consortium also has planning funds for a 100-bed Green House long term care facility to be located in Anchorage that will certainly draw from rural regions as well.

Despite the underserved nature of Alaska’s frontier areas, the small populations involved and the exploding demand for assisted living services statewide will make it difficult to prioritize the development of new state-operated Pioneer Homes in these areas. In addition, as noted above, several long term care projects are developing in rural frontier areas, and the Pioneer Home should remain cautious about developing competing facilities in Bethel or other rural communities that may

overwhelm demand and possibly threaten the sustainability of tribally operated nursing or assisted living facilities currently under development.

Because of these issues, the State should probably focus first on increasing access and utilization of Pioneer Homes by Alaska residents living in underserved regions by providing increased education to rural elders on the application waiting list process and encouraging these elders to actively plan for long term care needs.

## **MODEL OF CARE: Should New Pioneer Homes be Green Houses?**

Several alternatives exist for expansion of Pioneer Home beds including construction of a new Pioneer Home site similar in size to those currently operating, expansion of existing facilities, or development of small, stand-alone, home-like units. All of the Pioneer Homes except Palmer and Juneau present limits to expansion due to site constraints or historical designation, or in the case of Fairbanks, existing facility limitation. Trends in assisted living and nursing homes are towards smaller-size, more home-like facilities. We recommend that future investment in PH facilities to expand bed capacity be focused on small facilities.

One model that has gained a great deal of attention nationally is the Green House® model developed by Dr. Bill Thomas, a geriatrician who was responsible for the development of the Eden Alternative more than 15 years ago. Both Green House and Eden Alternative approaches focus on creating communities with more home-like physical and social environments to transform and improve the quality for life for the residents of long term care institutions. Like Eden Alternative, the Green House model was first developed for nursing homes in response to the medical model of care in large institutionalized settings, but it has subsequently been applied to assisted living and specialized units caring for residents with Alzheimer's and related disorders.

The Eden Alternative approach has already been fully adopted by all of the Pioneer Homes, which have incorporated the philosophy into their core values. This model fosters greater independence, privacy, and choice for each resident and is a key component in making Pioneer Homes desirable and sought after places for Alaskan elders to live. Changing the culture of Pioneer Homes to incorporate the Eden Alternative approach to long term care was designed to take place within the existing Pioneer Home facilities. However, the Pioneer Homes have made some physical modifications, creating local neighborhoods to organize the residents into smaller social groups and facilitate the implementation of the philosophy.

### **Green House Model**

The Green House model is seen as the next step in the evolution of the social model of care. It further de-institutionalizes the residential setting for nursing homes and assisted living facilities by completely eliminating large institutional environments. It requires new small, stand-alone, home-like facilities of no more than 10 to 12

beds each.<sup>1</sup> It also reorganizes the work of caring for elders into self-managed teams of direct care providers, who are assigned to each house and empowered to be responsible for the overall well-being of the residents. Clinical, business and some higher level administrative support for Green House's are provided by professionals who focus on planning and consultation with the direct care teams. Professional staff normally have offices outside the Green House.

**Facility:** Green House facilities must be totally new, purpose-designed facilities, designed according to specified licensing requirements (NCB Capital Impact, 2009). They include features that foster the independence of residents and social interactions between residents and staff. The facility must have no more than 10 residents with private rooms and baths located directly off a large common living/dining area, which includes a kitchen and large dining table.

Each home is also required to have a safe, accessible outdoor area and ceiling lifts designed into each bedroom. Green House designs, which have few or no corridors, efficiently utilize space and normally provide between 650 to 750 square feet per resident. By comparison, privately owned assisted living homes in Alaska are estimated to have about 500 square feet per bed (AHFC, 2006), and Pioneer Homes average about 950 square feet per resident. These figures, however, are not directly comparable as the Pioneer Homes are supported by administrative and professional staff that in Green Houses are housed outside the facility.

**Staffing and Organization:** Green House staffing is designed to focus more responsibility for planning care on self-managed work teams of direct care providers in each Green House. The direct care provider (called a shahbaz in Green House parlance) is usually a CNA or PCA, who may have advanced training and who is committed to support lives of continued growth, independence, and meaning for the residents. The direct care team also takes on duties of cooking, laundry, light housekeeping, recreation and social activities, and general house management. The teams are empowered to become the primary focus of responsibility for all aspects of the elders' care.

Green Houses strive to increase direct care staff by reducing auxiliary and support staffing and reallocating these resources to support the direct care staff. Licensed Green House nursing facilities are required to provide four hours of direct care staff per elder per day. There is no information on direct care staffing ratios in Green House assisted living facilities.

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<sup>1</sup> Originally designed only as stand-alone facilities, a new urban Green House is designed with 10 condominium-like units in one building, but each unit continues to function independently and includes all the elements of Green House design.

Green Houses also require an umbrella organization to oversee administration and business activities for each operating unit and to provide professional and clinical support services. Off-site professionals focus on planning and itinerate to the Green House periodically to consult with the direct care teams that are responsible for elder care in the facility.

## Costs of Operation

The cost of operating a Green House nursing home or assisted living facility is highly variable and depends partly on the operating environment<sup>2</sup> and location of the Green House. Cost comparisons among different institutions are also made difficult by the variations in case mix. In general, the literature has demonstrated that daily operating costs per resident in licensed Green House nursing homes have been comparable to other nursing facilities in similar locations (Rabig J, Thomas W. et al, 2006), and limited experience with a new Green House in Seward, Alaska, has supported this finding.

**Alaska Experience:** A new four- unit Green House is under construction in Seward. Providence Seward Mountain Haven is a 40-bed nursing facility that opened in fall 2009. Providence Health Systems estimated the total capital cost of the facility to be slightly below the costs of providing the same number of beds in a traditionally designed replacement facility (Bolton, 2009). While no operating cost data exist yet for the facility, the owner has budgeted and expects the cost per bed to be very similar to the traditional nursing home it is replacing. The Green House facility has the same overall staffing ratio as its predecessor. Dietary and housekeeping staff were retrained as CNAs and are included in the direct care teams, leading to higher ratios of direct care staff to residents.

Some operational costs are projected to increase. Direct care staff, including retrained housekeeping and dietary staff, were given a small wage increase to reflect increased responsibilities. Management is also concerned with potential increases in utility costs due to the Green House design that includes multiple buildings. Offsetting some of these projected costs are projected reductions in maintenance and support services which the administrator predicts will allow the operation of the new Green Houses to be implemented in a cost neutral manner.

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<sup>2</sup> This variability is demonstrated by the cost profiles for residential long term care facilities in Alaska, where Medicaid cost-based reimbursement rates vary by over 100 percent for nursing care services — with smaller, co-located (with rural hospitals), or remote frontier locations normally being much more expensive to operate than larger urban facilities. There are also significant differences between costs for providing assisted living care in Pioneer Homes versus privately operated assisted living homes across the state.

**Cost Data and Research:** There is very little national data and no local data on the operational costs of Green House assisted living facilities (in contrast to Green House nursing facilities). The national data seem to focus on nursing home costs, and there are no assisted living homes operating in Alaska that are licensed as a Green House project. However, many assisted living homes in Alaska caring for seniors supported with Medicaid Waivers or other private resources already resemble the Green House model in size and in the organization of work, although they are not functioning within the philosophical framework and standards established by the model.

Over 90 percent of the assisted living homes licensed for elder care in Alaska have fewer than 10 beds, and many are run by owner/operators who take direct care responsibilities for the residents of the home. The cost of care in these homes is often significantly below Pioneer Homes (State of Alaska, PCS, 2006, p. 40-41).

The national literature on Green House costs, as well as the experience to date of the Providence Seward Mountain Haven project, seem to indicate that the Green House model could be implemented in a cost neutral manner and within the cost environment of the Pioneer Homes. However, budget projections need to be verified using data on the operation of assisted living Green Houses in fiscal environments similar to the State of Alaska Pioneer Home system.

## **Concerns and Barriers in Adopting a Green House Model**

With the adoption of the social model of care and the Eden Alternative, the current Pioneer Homes have implemented many of the transformative elements of the Green House model that could feasibly be adopted within the design constraints of the existing facilities. Working within these constraints, the Pioneer Homes have created local neighborhoods to de-institutionalize the home and organize the residents into smaller social groups. They have also provided dedicated neighborhoods for enhanced care and security for Alzheimer's patients.

To fully implement the Green House model in Pioneer Homes would require the construction of new small facilities. Thus, implementation would not be feasible unless the State made a determination to expand the existing number of beds in the Pioneer Home system. Additionally, Green Houses may be less transformative for Alaska's assisted living environments, where residents needing this level of care already have the choice of many small, non-institutional, and privately owned assisted living homes.

There may be barriers to implementing the Green House model imposed by the negotiated union contract and work rules pertaining to the Pioneer Homes. Pioneer Home employees currently work under union work rules covering four separate bargaining units. Existing union contracts would probably not permit the organization of much of the work in a Pioneer Home into a single job description consistent with the responsibilities of direct care givers in the Green House model,

including housekeeping, laundry, cooking, menu planning, direct care and, in some cases, even light maintenance duties.

Implementing a Green House program staffed with directly-hired state employees would require the renegotiation or waiver of union work rules for the direct care staff employed to work in the facility. Since employee satisfaction, engagement, and compensation have generally tended to increase for many of the direct care workers which have been involved in Green House projects [ICOR (RW)], June, 2009], a Green House pilot project that includes evaluations of employee satisfaction (along with family and resident satisfaction and outcomes) will assist in reaching the necessary agreements on union work rules.

During site visits and interviews with Pioneer Home staff and residents, there was resistance voiced by residents and professional staff to the Green House concept as an efficient and desirable model for Alaska's Pioneer Homes. Residents who often had not heard about, or were not fully informed on, all elements of the model were none the less cautious about the desirability of living in a much smaller 10- to 12-bed home. Many voiced support for the wide range and variety of social contacts and activities available in the existing larger home.

Several administrators, who were well versed on the model, also voiced support for the existing social and recreational activities; they expressed doubt that this wide range of opportunities would be possible in a smaller facility. However, literature associated with Green House projects has consistently demonstrated higher levels of satisfaction in residents, families and employees in Green House facilities after the transfer from larger institutional settings (Rarbig J, Thomas W., et al, 2006 and ICOR, 2009).

## **NEW PIONEER HOMES: Where & When?**

Future demand for Pioneer Home services will be influenced by the availability on other services in the senior continuum of care, medical and technological advances, and the continued existence and expansion of Pioneer Home services. For the purposes of this report, future demand has been estimated by using the current resident population of the Pioneer Homes, grouped by age cohorts, and projected through 2030. Future expansion of beds is limited to the six communities where Pioneer Homes are currently located, with the exception of an ADRD-specialty Pioneer Home for the Kenai Peninsula. Other areas of the state do not have the population necessary to assure that even a small Pioneer Home would be economically viable.

Determining future demand for Pioneer Home beds is a multi-stage process. The first step is to determine the distribution by age cohort of the current residents in the Pioneer Homes. This is important because more than half (54 percent) of current residents are 85 years of age or older, implying that demand is greater for

older seniors (85+) than for younger seniors (65 to 74 years). In the future, demand for residential services will be greatest as Baby Boomers move into their 80s.

**Table 22: Percent of residents by age by Pioneer Home, June 2009**

	<b>65-69</b>	<b>70-74</b>	<b>75-79</b>	<b>80-84</b>	<b>85-89</b>	<b>90+</b>	<b>Unknown</b>
Anchorage	2%	5%	12%	30%	26%	24%	0%
Fairbanks	1%	4%	6%	18%	36%	36%	0%
Juneau	0%	9%	5%	21%	28%	37%	0%
Ketchikan	3%	10%	10%	23%	10%	35%	10%
Palmer	1%	3%	9%	23%	33%	31%	0%
Sitka	7%	17%	21%	29%	19%	7%	0%
<b>Total</b>	<b>2%</b>	<b>7%</b>	<b>11%</b>	<b>25%</b>	<b>27%</b>	<b>27%</b>	<b>1%</b>

### Projecting Changes in the Senior Population by Service Area

The second step in determining future demand for services is to examine how the number of seniors is expected to change over the next 20 years. In order to make population-based projections for each Pioneer Home, it is necessary to assume that each has a service area. While all the Pioneer Homes have some residents who live outside their assumed service area, the majority live in boroughs and census areas in the same region as the facility.

The ADOLWD population projection for each region and age cohort has been used to estimate the demand for Pioneer Home services into the future. The following tables show the population projections and rates of change by senior age cohort for the assumed service areas of the six existing Pioneer Homes. The census areas and boroughs included in each service area are listed in the notes to each table.

**Table 23: Anchorage Pioneer Home service area population by age cohort, 2010-2030**

<b>Age</b>	<b>Projected Population</b>					<b>Percent Change</b>			
	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2010-15</b>	<b>2015-20</b>	<b>2020-25</b>	<b>2025-30</b>
65-69	8,825	13,331	16,029	16,859	15,643	51.1%	20.2%	5.2%	-7.2%
70-74	5,187	7,698	11,828	14,385	15,087	48.4%	53.7%	21.6%	4.9%
75-79	3,628	4,353	6,521	10,143	12,352	20.0%	49.8%	55.5%	21.8%
80-84	2,426	2,760	3,347	5,079	7,937	13.8%	21.3%	51.7%	56.3%
85-89	1,416	1,646	1,876	2,302	3,493	16.2%	14.0%	22.7%	51.7%
90+	802	1,018	1,220	1,403	1,694	26.9%	19.8%	15.0%	20.7%

Note: Based on ADOLWD projections for the Municipality of Anchorage.

**Table 24: Palmer Veterans and Pioneer Home service area population by age, 2010-2030**

Age	Projected Population					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
65-69	2,519	3,657	5,108	5,648	5,529	45.2%	39.7%	10.6%	-2.1%
70-74	1,633	2,307	3,343	4,682	5,233	41.3%	44.9%	40.1%	11.8%
75-79	1,116	1,401	1,975	2,889	4,090	25.5%	41.0%	46.3%	41.6%
80-84	736	889	1,113	1,581	2,336	20.8%	25.2%	42.0%	47.8%
85-89	391	518	626	789	1,128	32.5%	20.8%	26.0%	43.0%
90+	186	280	378	466	590	50.5%	35.0%	23.3%	26.6%

Note: Based on ADOLWD projections for the Matanuska-Susitna Borough.

**Table 25: Fairbanks Pioneer Home service area population by age cohort, 2010-2030**

Age	Projected Population					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
65-69	3,129	4,616	5,650	5,636	5,214	47.5%	22.4%	-0.2%	-7.5%
70-74	1,851	2,725	4,078	5,051	5,064	47.2%	49.7%	23.9%	0.3%
75-79	1,178	1,523	2,268	3,451	4,319	29.3%	48.9%	52.2%	25.2%
80-84	809	867	1,137	1,726	2,673	7.2%	31.1%	51.8%	54.9%
85-89	429	540	582	773	1,185	25.9%	7.8%	32.8%	53.3%
90+	243	306	384	434	552	25.9%	25.5%	13.0%	27.2%

Note: Based on ADOLWD projections for the Fairbanks North Star Borough, Denali Borough, Southeast Fairbanks Census Area, and Yukon-Koyukuk Census Area.

**Table 26: Juneau Pioneer Home service area population by age cohort, 2010-2030**

Age	Projected Population					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
65-69	1411	2260	2615	2329	2062	60.2%	15.7%	-10.9%	-11.5%
70-74	879	1212	1971	2309	2086	37.9%	62.6%	17.1%	-9.7%
75-79	491	700	986	1636	1963	42.6%	40.9%	65.9%	20.0%
80-84	390	371	529	760	1284	-4.9%	42.6%	43.7%	68.9%
85-89	229	245	236	341	508	7.0%	-3.7%	44.5%	49.0%
90+	154	172	186	185	243	11.7%	8.1%	-0.5%	31.4%

Note: Based on ADOLWD projections for the Juneau, Haines, and Yakutat Boroughs and the Skagway-Hoonah-Angoon Census Area.

**Table 27: Ketchikan Pioneer Home service area population by age cohort, 2010-2030**

Age	Projected Population					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
65-69	810	1,000	1,191	1,095	898	23.5%	19.1%	-8.1%	18.0%
70-74	505	702	877	1,027	1,037	39.0%	24.9%	17.1%	1.0%
75-79	289	393	559	787	884	36.0%	42.2%	40.8%	12.3%
80-84	233	216	292	440	556	-7.3%	35.2%	50.7%	26.4%
85-89	133	151	140	224	284	13.5%	-7.3%	60.0%	26.8%
90+	66	81	98	105	124	22.7%	21.0%	7.1%	18.1%

Note: Based on ADOLWD projections for the Prince of Wales-Outer Ketchikan Census Area and Ketchikan Gateway Borough.

**Sitka Pioneer Home Service Area service area population by age cohort, 2010-2030**

Age	Projected Population					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
65-69	641	809	891	946	692	26.2%	10.1%	6.2%	26.8%
70-74	472	558	708	789	849	18.2%	26.9%	11.4%	7.6%
75-79	277	382	454	589	668	37.9%	18.8%	29.7%	13.4%
80-84	227	208	285	348	460	-8.4%	37.0%	22.1%	32.2%
85-89	145	155	144	198	241	6.9%	-7.1%	37.5%	21.7%
90+	85	97	104	102	130	14.1%	7.2%	-1.9%	27.5%

Note: Based on ADOLWD projections for the Sitka Borough and Wrangell-Petersburg Census Area.

## Estimating Future Demand for Pioneer Home Beds

Once the rate of senior population change is determined for each Pioneer Home service area, it is possible to project future demand for services. Using the current residents as a starting point, the projected change for each age cohort in the service area is used to project the number of Pioneer Home beds that will be needed over the next 20 years. As would be expected, the demand for beds will be the greatest in Anchorage, where an additional 287 beds will be needed by 2030, while Ketchikan will need only an additional 38 beds over the same period. In all, the demand for Pioneer Home beds will increase from the current 459 to 1,185 by 2030. Nearly 100 new beds will be needed by 2015.

**Table 28: Projected demand for Pioneer Home beds, 2015-2030**

Pioneer Home	2015	2020	2025	2030
Anchorage	199	248	330	451
Fairbanks	104	127	164	229
Palmer	95	122	159	218
Juneau	48	57	72	99
Ketchikan	42	52	66	78
Sitka	65	77	94	110
<b>Total</b>	<b>553</b>	<b>683</b>	<b>885</b>	<b>1,185</b>

**Table 29: New beds needed to meet projected demand, 2015-2030**

Pioneer Home	Current Beds	2015	2020	2025	2030
Anchorage	164	35	49	82	121
Fairbanks	84	20	23	37	65
Palmer	70	25	28	37	58
Juneau	43	5	9	15	27
Ketchikan	40	6	10	14	11
Sitka	58	7	12	17	16
<b>Total</b>	<b>459</b>	<b>98</b>	<b>131</b>	<b>202</b>	<b>298</b>

## Calculating Demand for New 10-bed Green Houses

If we assume that new facilities will be built along the lines of the smaller stand-alone, home-like units of the Green House model, the final step in determining the number of new facilities required to meet future demand is to divide the number of new Pioneer Home beds needed by 2015 to 2030 in each service area (see Table 29) by the typical number of Green House beds per unit: ten.

Table 30 shows the number of new 10-bed Green Houses that will be needed by service area for each five-year period between 2015 and 2030. Over the next 20 years, Anchorage will need 29 10-bed facilities while Ketchikan will only need four. These separate 10-bed facilities could be clustered in condominium-like developments within a service area and/or co-located near the existing larger Pioneer Home if space is available. By 2015, there will be demand for ten new Green Houses statewide.

**Table 30: Recommended number of new Pioneer Home 10-bed Green Houses**

<b>Pioneer Home</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>Total</b>
Anchorage	4	5	8	12	<b>29</b>
Fairbanks	2	2	4	6	<b>14</b>
Palmer	2	3	4	6	<b>15</b>
Juneau	1	1	2	3	<b>6</b>
Ketchikan	1	1	1	1	<b>4</b>
Sitka	0	2	2	1	<b>5</b>
Kenai	0	1	0	0	<b>1</b>
<b>Total</b>	<b>10</b>	<b>15</b>	<b>21</b>	<b>29</b>	<b>74</b>

# Appendices

## APPENDIX I: Family Survey Summary

A survey was conducted in order to gather information from family members of Pioneer Home residents. A paper survey was sent to family members by each Pioneer Home, asking to respond with the paper survey and giving them the alternative of completing the survey online. A total of 62 completed surveys were received, 40 on paper and 22 online.

Family members from the Sitka Pioneer Home submitted the most response (17), followed by Juneau (16) and Palmer (15). Eight (8) responses were received from family members of residents at the Fairbanks Pioneer Home, 5 from Anchorage and one from Ketchikan.

**Table 31: Responses by Pioneer Home**

Pioneer Home	Number	Percent
Anchorage	5	8%
Fairbanks	8	13%
Juneau	16	26%
Ketchikan	1	2%
Palmer	15	24%
Sitka	17	27%
<b>Total</b>	<b>62</b>	<b>100%</b>

Approximately 70% of the family members have lived at the Pioneer Homes for 3 years or less while 17% have lived there for more than 5 years.

**Table 32: How long has your family member lived at the Pioneer Home?**

Length of Residence	Number	Percent
Less than 1 year	14	23%
1 to 3 years	28	47%
4 or 5 years	8	13%
More than 5 years	10	17%
<b>Total</b>	<b>60</b>	<b>100%</b>

Nearly two-thirds (63%) of the family members of survey respondents are 85 or older. Only 7% are less than 75 years old.

**Table 33: How old is your family member who lives at the Pioneer Home?**

Age Group	Number	Percent
65 to 69 years	1	2%
70 to 74 years	3	5%
75 to 79 years	7	11%
80 to 84 years	12	20%
85 to 89 years	18	30%
90 to 99 years	19	31%
More than 100	1	2%
<b>Total</b>	<b>61</b>	<b>100%</b>

### 1. What can we do now to make the Pioneer Homes better?

**General Comments:** Survey respondents were overwhelmingly positive about the care their family members receive in the Pioneer Homes. Many mentioned the highly qualified and caring staff, the clean and cheerful surroundings, and the fact that the Pioneer Home makes it possible for them to keep their relative close to them.

*“I think attitude is everything. The staff at the Pioneers Home are very upbeat and will stop and be kind to the residents and talk to them when passing. Hopefully every home does this. “*

*“I'm perfectly satisfied with the care and consideration extended to my husband. Care of persons with dementia is extremely difficult and the nurse and caretakers do an excellent job.”*

*“The Pioneer Home seems like the best place for family to live if they can't or don't want to live in their own home.”*

**Services and Activities:** Many respondents mentioned the need for more activities, especially things like get-togethers, barbecues and picnics. A number of family members suggested that having a physical therapist on staff would help keep residents active with range of motion exercises and regular walks.

**Staff and Staffing Levels:** Many family members mentioned the importance of keeping the Pioneer Homes fully staffed and the staff/resident ratio consistent. Individual respondents recommended that there be more activity staff so that activities are available on holidays and the need for all staff members to receive Eden Alternative training. One family member noted the importance of Certified Nursing Assistants in the care of residents.

*“The main caretakers of residents are the CNA's. They are underpaid and not appreciated and there is no room for advancement. This leads to turnover, which is not good for residents who need consistency. The better we treat our CNA's the more productive they will be.”*

**Food:** Food is a major topic of discussion among residents of Pioneer Homes and family members. Almost everyone has an opinion about Pioneer Home food and dining. Among the recommendations were a sandwich option at lunch, more local foods, fresh vegetables, more spices and 100 percent fruit juices.

**Facilities:** Family members suggested the need for central air, better ceiling lights, new carpeting, private bathrooms, larger resident rooms, building exits that make it possible for residents to get outside to walk or sit.

## 2. **If new Pioneer Homes are built in the future, how should they be different than the current Homes?**

**General Comments:** Many of the respondents said that they thought Pioneer Homes should not change, but that there was probably a need for more of the Homes. Changes mentioned include larger resident rooms and greater energy efficiency (“green homes”). A number of family members said they think the size of the Pioneer Homes is perfect and that rather than adding on to existing Homes, new Homes should be built.

*“They shouldn't be too big of a building, maybe a campus setting with several smaller buildings linked with walking paths. It would be good to have progressive housing from a small apartment to full time medical care.”*

**Services and Locations:** Respondents said that there will be the need for more assistance to those with Alzheimer’s disease in the future. A family member suggested that the Eden Alternative and Greenhouse concepts be explored for future pioneer Homes. Some family members thought new Pioneer Homes should be located in rural settings, while others thought being closer to down town was better.

**Resident Rooms:** Family members had many suggestions for how resident rooms should be changed or improved, including that all rooms would have private bathrooms, the resident rooms should be larger and there should be more private rooms available, more storage space in the rooms, and more couples rooms.

**New Facility Design:** Many survey respondents indicated that one-story buildings are preferable, but that might not be the most efficient or economical approach. A number suggested shorter hallways so that the nurse’s stations are closer to all rooms. Other suggestions included small dining rooms on each wing, improved air

handling systems and more windows or skylights. One person recommended that each floor be a complete unit, with a kitchen dining room and lounge.

*“Good design overall, but if rooms could be designed a bit larger, brighter and more conducive for visitation... how about skylights! Outside stimulation is critical (both getting folks out and outsiders in) so the children’s daycare was brilliant – more things like that would be great! Anything to help get the public more engaged with our seniors!”*

**3. In the future, would the services provided in the Homes (food, nursing support, recreation, etc.) be the same? If not, how should they change?**

**General Comments:** A number of respondents again stated that they think the care provided by the Pioneer Homes is wonderful and that nothing should be changed. There was a suggestion that the Pioneer Homes become more energy efficient or “green” and that new approaches be explored for caring for people with dementia or ARDA.

*“Research is showing specific targeted cognitive rehab works especially for many with brain affected disorders. I also think continued expansion to get members more involved in the community and community more involved with them (less isolation) will continue to grow. This will require more community presence within and outside facility that targets members in this facility.*

**Pioneer Home Workforce:** Family members recommended that the staff/resident ratio be expanded, especially the number of CNAs so that they can increase the amount of time doing activities with residents. Increases in RNs and physical therapy support were also recommended.

*“Nursing support has been cut back a good deal of the years and, though the nurses now working there are excellent - I know many of them personally - I don't think the nursing staff should be stretched further. “*

**Food and Dining:** A number of people said that they thought the food at the Pioneer Homes was pretty good. Other respondents suggested that there be a greater variety of foods and that the food should be more specific to the needs and desires of the residents. Family members suggested rotating menus every two months and including more local foods.

*"If they could purchase locally grown food, it would help support the Alaska economy and taste better."*

*"My parents' food is served attractively and varied. Even my mom's puree of food is nicely decorated."*

**Activities:** Survey respondents generally wanted more activities, including residents going to events in the community. Family members recommended more physical exercise and recreational opportunities and making sure there are activities planned on weekends and holidays.

*"I wish there was more activities on the actual holidays. The people know it's a holiday and are sad with nothing to do. Not everyone has someone to take them out. Also it would be nice to have volunteers to take them to see the outside parades. It's too much for the limited staff on holidays."*

#### **4. The population of Alaska has grown since the existing Pioneer Homes were built. If new Pioneer Homes are built, where should they be located?**

Family members had a variety of opinions about where future Pioneer Homes should be located. Some felt that the current homes should be expanded, or that new facilities should be co-located with existing Pioneer Homes to form campuses. Others felt that every community should have a Pioneer Home. Some said in the centers of towns while others suggested rural areas. One person felt that it would be difficult to justify new Homes.

*"Where do the bulk of your residents come from? I would try to locate new homes near where most of the residents are from so families can stay involved in the care. Again, in order to keep the facilities small, perhaps you could construct a series of buildings at a site - rather than one huge building or new buildings in really isolated areas where there aren't families nearby. Each of these smaller buildings would become a "family" so the numbers aren't overwhelming. That way you could accommodate more residents at one location without it becoming a factory."*

*"With six homes already, and the population centers having homes, I don't see "you" will ever be able to justify new institutions."*

**Current Locations:** A number of respondents said that the availability of Pioneer Home care should be expanded in their current locations. They pointed out that this is where the population is going, and all of the Pioneer Homes have wait lists.

*"I think Juneau, Anchorage, Sitka, Ketchikan, Palmer, and Fairbanks are still the best places for homes! Having two homes in Juneau, Anchorage, and Fairbanks might be a good idea. There seems to be a waiting list in the homes and having two homes in Juneau, Anchorage, and Fairbanks where most of the population is would be helpful to the waiting lists!"*

**New Locations:** Survey respondents suggested many communities as potential locations for Pioneer Homes, including Kodiak, Barrow, Bethel, Nome, Eagle River, Kenai, Cordova, Kotzebue, Seward, Wasilla, Homer, Tok, Dillingham, Valdez and North Pole.

*"It's very striking to me that there are no Pioneer Homes in Western Alaska or on the North Slope. I know cost may prohibit building one in Nome or Barrow, but certainly one should be built in Bethel. Bethel has a fairly large population and some medical infrastructure. Also, it can be regionally serving to other towns and villages. People shouldn't have to be forced to choose between putting a loved one in a home that's a thousand miles away or keeping a senile elder at home. Kodiak also seems like a city with a great need of a Pioneer Home."*

## APPENDIX II: Administrator & Staff Interview Summary

Information Insights visited each of the six Pioneer Homes in June 2009 to talk to staff and residents about the current operations of the Homes and to gather their recommendations for the future. Each one-day visit involved interviews with the facility administrator, staff members and residents. Family members were interviewed at a few of the homes. The following is a summary of the interviews.

### General Issues

#### 1. What do you see as the role/mission of the Pioneer Homes?

The administrators of the six Pioneer Homes see their mission as providing care and support in a home-like environment consistent with the principles of the Eden Alternative. In recent years, the Pioneer Homes have taken the lead in caring for seniors with ADRD in a minimally restrictive environment. Another role that has evolved in recent years for providers of palliative care for residents is keeping them comfortable and engaged until their death. Each Pioneer Home has a fairly well-defined service area, except for the Sitka home, which has residents from throughout the state. Residents often go there when a bed is not available in a Pioneer Home closer to their homes.

#### 2. How has the role/mission of the PH changed?

In the past, people came to the Pioneer Homes when they were 70 to 75 years old, the majority entering when they needed Level I care. The development of community-based services, including meal programs, transportation, respite and personal care services, made it possible for seniors to remain in their homes longer than in the past. Now most residents come when they are 85 or older. They also come in with higher care needs, generally coming in as Level II or III. The Pioneer Homes are now identified as a specialty provider of services for seniors with ADRD. The Pioneer Homes have also seen an increase in the number of residents with dementia as well as chronic mental illnesses.

#### 3. What role should PHs play in supporting elders in the future?

The administrators had a number of ideas for what might happen in the future:

- People are being kept in their homes as long as possible now. New community services really cannot push this much further.
- There may be some “push back” on the use of Medicaid waivers to keep people out of assisted living and nursing homes. The cost is often higher than the cost of assisted living care.
- The system may become more and more devoted to ADRD care over the next decade as the population ages and increased numbers of Alaskans must deal with this issue.

- The Pioneer Homes should support improved access to geriatric health care services, either through community health centers or other medical care providers.
  - Pioneer Homes must develop more capacity to support the mental health needs of the residents. All of the Pioneer Homes are having problems accessing mental health services from community providers. Staff members have limited training or assistance in supporting residents with mental health needs.
  - Pioneer homes will continue to be teaching centers for geriatric care.
  - The Pioneer Homes should strive to maintain the current mix of residents and not move to a nursing home care level.
  - The role of the Palmer Pioneer Home as a Veterans Home will continue to evolve. The number of Veterans at the Home will increase over time, eventually up to 75 percent of residents may be Veterans.
4. **Do you see other models of care - in state or elsewhere - that you think hold promise for the future?**

The Pioneer Home administrators generally felt that the current model works well and that the focus should be on improving the Eden Alternative model and adapting Homes to meet the needs of residents with higher support needs, including those with mental illnesses. A number of those interviewed mentioned the Greenhouse model of care as one that had possibilities. However, the model may not be compatible with the design and sizes of the current Pioneer Homes. There was concern that the small size of Greenhouse homes might lead to isolation for higher level residents. One administrator said that if Greenhouses are developed, they should provide care to a mix of populations – people with developmental disabilities, elders, Veterans – who need a similar level of care. This would be especially important in smaller communities where there is a shortage of qualified staff.

5. **What is the relationship between the Pioneer Home and other assisted living homes, nursing homes, and community based services in your community?**

All of the Pioneer Homes are located in communities that have community-based services for elders, including programs such as independent living apartments, home health, personal care services, respite, meals and transportation. The Homes have strong relationships with community organizations (church groups, civic organizations, businesses, schools), many of which come into the Homes to volunteer and provide activities or entertain residents. At least three of the Pioneer Homes have onsite pre-school programs that encourage and support interaction between the residents and children.

Most of the Homes have generally good relationships with local hospitals. All of the administrators mentioned the need for additional discharge planning for residents admitted to hospitals. The Homes are often pressured to accept a resident back who has medical needs that are beyond those provided by the Home.

The Pioneer Homes do not have much interaction with other assisted living homes in their communities.

**6. Are there special populations of elders (like violently mentally ill) that you cannot serve or have difficulty serving?**

Residents with chronic mental illnesses presented the greatest challenge for Pioneer Homes. While many residents with chronic mental illness can be cared for and live well in Pioneer Homes, a small percentage can be assaultive and present a danger to themselves or others. These patients are difficult for the staff to handle, and the lack of mental health professional support in the community makes it difficult to get ongoing medication monitoring and overall support for the resident. There is only one geropsychiatrist in the state, and none of the Pioneer Homes have an on-going relationship with community behavioral health centers in their communities. All of the Pioneer Homes need assistance with monitoring the interactions between psychiatric and other medications.

Another issue is the increasing number of very obese residents who present lifting and transferring issues for staff.

## **Residents**

**7. Level I to Level III mix, how has it changed?**

Residents of all of the Pioneer Homes have higher levels of care and need more support. Older residents progress to higher levels of acuity faster. The average tenure for residents is decreasing.

**8. How has it impacted services or care?**

There are increased demands on staff, more residents in wheelchairs, and more residents with dementia. Staff members provide a higher level of palliative care.

**9. How many other minority residents (Alaska Native, black, Hispanic, Asian, etc.)**

Nearly 90 percent of Pioneer Home residents are White, 7.8 percent are Alaska Native and 2.4% are other minorities. The Sitka Pioneer Home (20.7 percent) has the highest percentage of minority (including Alaska Native) residents and the Palmer Home (2.9 percent) has the lowest.

**10. Do you have any specialized programs? Alzheimer's, etc.**

All of the Pioneer Homes have developed a special capacity to deal with AD/DRD residents. Special neighborhoods are designed to prevent wandering and staff members are trained to deal with the needs of patients with a minimum of control and disruption. The Palmer Pioneer Home has a specialized focus for veterans both through the programs that are required by regulation and by the association with outside veterans groups, which sometimes choose to provide services or financial support limited to residents who are veterans. The Fairbanks Pioneer Home

provides care for almost as many veterans as Palmer, although there are not special programs.

**11. What specialized services do you provide to each group?**

The Pioneer Homes provide specialized care for residents with ADRD that includes individualized neighborhoods, specially designed activities and training for caregivers. Residents with ADRD are integrated into the general population.

Specialized programs for veterans at the Palmer Pioneer Home are required by regulation. The Home makes every effort to integrate veteran and non-veteran services.

**12. Where are most of the residents admitted from (Nursing Home, living at home, living with relatives, hospital)?**

Most residents are admitted to the Pioneers Homes from their home or the home of one of their children. Family members usually seek the admission. Residents are sometimes admitted from a nursing home or from another assisted living home.

**13. Where are most of the residents discharged to (diseased, family home, hospital, NH)?**

Most residents die at the Pioneer Home.

**14. What are the primary factors leading elders to admission (social situation, ADL deficits, illness, dementia, multiple)?**

Admissions usually are the result of a decline in ability to live independently. Specific reasons include need for assistance in managing medications, falls, chronic health problems and fragility. Residents sometimes accompany a spouse to a Pioneers Home. ADRD and dementia are also common reasons for admission.

## **Workforce**

**15. Most difficult to recruit positions**

Registered nurses and physical therapists were noted as the most difficult positions to fill by all of the Pioneer Homes, except one. The Palmer Home has the most difficulty recruiting and retaining kitchen and housekeeping staff.

**16. Changes in workforce due to resident needs**

Most of the Pioneer Homes are finding it difficult to add new positions to meet the increasing needs of the residents. The higher levels of care mean more demands on staff to assist with Activities of Daily Living (ADLs) and less time to support the emotional and social needs of the residents.

**17. What kinds of workforce skills do you need but can't find?**

The Pioneer Homes need staff with training in geriatric specialties and training on dealing with residents with mental health issues, especially combative patients. A

number of the administrators mentioned the need for restorative aides or physical therapists to keep people moving and active.

**18. What are the factors that make it difficult to recruit RNs, LPNs, CNAs, other positions?**

The factors listed as barriers to recruitment include:

- State benefits are not competitive, especially retirement.
- State salaries are not competitive for RNs, and many RNs prefer the work schedules offered by hospitals.
- The State does not provide support to RNs and CHAs for pursuing CMEs.
- Reliance on union for Kitchen workers makes it difficult to recruit and fill positions quickly (Palmer).

**19. What professional services are provided primarily through contract? Are these difficult to obtain?**

The Pioneer Homes contract for dietary services through NANA, physical therapy services and pharmacy. The Palmer Home contracts for some required services (dental, transportation and social work) for veterans.

**20. Are there incentives that would improve recruitment and retention?**

The incentives mentioned by Pioneer Home administrators include:

- Competitive pay scales.
- Creation of career ladders, especially CNAs, who should be encouraged and supported (including tuition support) in pursuing an RN degree.
- Offering continuing professional training support.
- Employee awards and recognition
- Employee wellness programs

## **Facilities**

**21. How does this building drive the services and care you provide to residents?**

Most of the Pioneer Homes were built before the introduction of the Eden Alternative, which encourages social interaction and activities. Many of the rooms are too small to accommodate group activities, and space limitations make it difficult to provide the care people need. Pioneer Homes are also struggling with the need for more space devoted to Level III residents. The Anchorage Pioneer Home has zoning restrictions that prevent more space being devoted to level III residents.

Other facility limitations include:

- There is limited kitchen access for residents who wish to cook.
- Double rooms which limit occupancy and privacy.
- Most Homes have limited storage and employee support space.

- Some of the Homes have limited parking space.
- Resident rooms are too small for bathing in room.

## **22. If you could build new, ideal Pioneer Homes, what would it look like?**

Some of the ideas for new, ideal Pioneer Homes include:

- Smaller homes on the water (20 to 100 beds) that provide a combination of independent living and care for people with high needs. Central courtyard. Plenty of space for walking. All of the homes would be connected, with a large common area.
- Circular hallways so that residents can walk.
- Apartments where people can die surrounded by their families.
- Wellness programs, including massages, pedicures, etc.
- More fitness opportunities.
- More storage space for residents.
- Pod like neighborhoods in units similar to Greenhouse but connected for facility and staffing efficiency.
- Reduction in restriction in work rules imposed by unions so a more pure Eden or greenhouse environment is possible.

## APPENDIX III: Population Projections

The following tables show the projections by state demographers of Alaska's senior (age 65+) and pre-senior (age 60-64) populations for 2015-2030, which have been used to estimate future demand for Pioneer Home beds at existing utilization rates. Population projections are shown for each economic region, borough and census area, and for the state as a whole. They are broken out by five-year period for each five-year age cohort starting with age 60. Table 68 on page 73 shows the projected change in the veteran population over age 65 by location for 2010-2030.

### Population Projections for the State of Alaska

Table 34: State of Alaska population projections by age cohort (age 60+), 2015-2030

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>35,359</b>	<b>43,061</b>	<b>44,317</b>	<b>40,560</b>	<b>33,434</b>	<b>21.8%</b>	<b>2.9%</b>	<b>-8.5%</b>	<b>-17.6%</b>
<b>Seniors (Age 65+)</b>									
65-69	21,872	31,865	39,135	40,455	36,954	45.7%	22.8%	3.4%	-8.7%
70-74	13,251	19,091	28,193	35,020	36,363	44.1%	47.7%	24.2%	3.8%
75-79	8,854	10,924	15,916	23,880	29,953	23.4%	45.7%	50.0%	25.4%
80-84	6,026	6,655	8,278	12,264	18,645	10.4%	24.4%	48.2%	52.0%
85-89	3,435	4,033	4,475	5,635	8,414	17.4%	11.0%	25.9%	49.3%
90+	1,886	2,412	2,905	3,292	4,062	27.9%	20.4%	13.3%	23.4%
<b>Total 65+</b>	<b>55,324</b>	<b>74,980</b>	<b>98,902</b>	<b>120,546</b>	<b>134,391</b>	<b>35.5%</b>	<b>31.9%</b>	<b>21.9%</b>	<b>11.5%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

### Population Projections for Alaska Economic Regions

Table 35: Anchorage-Mat-Su population projections by age cohort (age 60+), 2015-2030

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>18,662</b>	<b>23,040</b>	<b>24,437</b>	<b>23,119</b>	<b>19,472</b>	<b>23.5%</b>	<b>6.1%</b>	<b>-5.4%</b>	<b>-15.8%</b>
<b>Seniors (Age 65+)</b>									
65-69	11,344	16,988	21,137	22,507	21,172	49.8%	24.4%	6.5%	-5.9%
70-74	6,820	10,005	15,171	19,067	20,320	46.7%	51.6%	25.7%	6.6%
75-79	4,744	5,754	8,496	13,032	16,442	21.3%	47.7%	53.4%	26.2%
80-84	3,162	3,649	4,460	6,660	10,273	15.4%	22.2%	49.3%	54.2%
85-89	1,807	2,164	2,502	3,091	4,621	19.8%	15.6%	23.5%	49.5%
90+	988	1,298	1,598	1,869	2,284	31.4%	23.1%	17.0%	22.2%
<b>Total 65+</b>	<b>28,865</b>	<b>39,858</b>	<b>53,364</b>	<b>66,226</b>	<b>75,112</b>	<b>38.1%</b>	<b>33.9%</b>	<b>24.1%</b>	<b>13.4%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 36: Gulf Coast population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>4,740</b>	<b>5,867</b>	<b>5,742</b>	<b>4,800</b>	<b>3,864</b>	<b>23.8%</b>	<b>-2.1%</b>	<b>-16.4%</b>	<b>-19.5%</b>
<b>Seniors (Age 65+)</b>									
65-69	3,056	4,315	5,370	5,280	4,415	41.2%	24.5%	-1.7%	-16.4%
70-74	1,835	2,670	3,817	4,808	4,754	45.5%	43.0%	26.0%	-1.1%
75-79	1,202	1,499	2,209	3,218	4,107	24.7%	47.4%	45.7%	27.6%
80-84	790	897	1,127	1,697	2,514	13.5%	25.6%	50.6%	48.1%
85-89	482	539	612	776	1,176	11.8%	13.5%	26.8%	51.6%
90+	245	339	401	457	568	38.4%	18.3%	14.0%	24.3%
<b>Total 65+</b>	<b>7,610</b>	<b>10,259</b>	<b>13,536</b>	<b>16,236</b>	<b>17,534</b>	<b>34.8%</b>	<b>31.9%</b>	<b>20.0%</b>	<b>8.0%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 37: Interior population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>5,091</b>	<b>6,182</b>	<b>6,140</b>	<b>5,685</b>	<b>4,703</b>	<b>21.4%</b>	<b>-0.7%</b>	<b>-7.4%</b>	<b>-17.3%</b>
<b>Seniors (Age 65+)</b>									
65-69	3,129	4,616	5,650	5,636	5,214	47.5%	22.4%	-0.2%	-7.5%
70-74	1,851	2,725	4,078	5,051	5,064	47.2%	49.7%	23.9%	0.3%
75-79	1,178	1,523	2,268	3,451	4,319	29.3%	48.9%	52.2%	25.2%
80-84	809	867	1,137	1,726	2,673	7.2%	31.1%	51.8%	54.9%
85-89	429	540	582	773	1,185	25.9%	7.8%	32.8%	53.3%
90+	243	306	384	434	552	25.9%	25.5%	13.0%	27.2%
<b>Total 65+</b>	<b>7,639</b>	<b>10,577</b>	<b>14,099</b>	<b>17,071</b>	<b>19,007</b>	<b>38.5%</b>	<b>33.3%</b>	<b>21.1%</b>	<b>11.3%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 38: Northern population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>889</b>	<b>1,087</b>	<b>1,164</b>	<b>1,043</b>	<b>864</b>	<b>22.3%</b>	<b>7.1%</b>	<b>-10.4%</b>	<b>-17.2%</b>
<b>Seniors (Age 65+)</b>									
65-69	562	755	933	1,007	911	34.3%	23.6%	7.9%	-9.5%
70-74	358	470	637	801	878	31.3%	35.5%	25.7%	9.6%
75-79	262	267	358	495	641	1.9%	34.1%	38.3%	29.5%
80-84	174	174	176	245	352	0.0%	1.1%	39.2%	43.7%
85-89	80	99	98	99	147	23.8%	-1.0%	1.0%	48.5%
90+	40	45	55	57	61	12.5%	22.2%	3.6%	7.0%
<b>Total 65+</b>	<b>1,476</b>	<b>1,810</b>	<b>2,257</b>	<b>2,704</b>	<b>2,990</b>	<b>22.6%</b>	<b>24.7%</b>	<b>19.8%</b>	<b>10.6%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 39: Southeast population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>4,561</b>	<b>5,230</b>	<b>4,908</b>	<b>4,017</b>	<b>3,018</b>	<b>14.7%</b>	<b>-6.2%</b>	<b>-18.2%</b>	<b>-24.9%</b>
<b>Seniors (Age 65+)</b>									
65-69	2,862	4,069	4,697	4,426	3,652	42.2%	15.4%	-5.8%	-17.5%
70-74	1,856	2,472	3,556	4,154	3,972	33.2%	43.9%	16.8%	-4.4%
75-79	1,057	1,475	1,999	2,941	3,515	39.5%	35.5%	47.1%	19.5%
80-84	850	795	1,106	1,532	2,300	-6.5%	39.1%	38.5%	50.1%
85-89	507	551	520	732	1,033	8.7%	-5.6%	40.8%	41.1%
90+	305	350	388	383	497	14.8%	10.9%	-1.3%	29.8%
<b>Total 65+</b>	<b>7,437</b>	<b>9,712</b>	<b>12,266</b>	<b>14,168</b>	<b>14,969</b>	<b>30.6%</b>	<b>26.3%</b>	<b>15.5%</b>	<b>5.7%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 40: Southwest population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>1,416</b>	<b>1,655</b>	<b>1,926</b>	<b>1,896</b>	<b>1,513</b>	<b>16.9%</b>	<b>16.4%</b>	<b>-1.6%</b>	<b>-20.2%</b>
<b>Seniors (Age 65+)</b>									
65-69	919	1,122	1,348	1,599	1,590	22.1%	20.1%	18.6%	-0.6%
70-74	531	749	934	1,139	1,375	41.1%	24.7%	21.9%	20.7%
75-79	411	406	586	743	929	-1.2%	44.3%	26.8%	25.0%
80-84	241	273	272	404	533	13.3%	-0.4%	48.5%	31.9%
85-89	130	140	161	164	252	7.7%	15.0%	1.9%	53.7%
90+	65	74	79	92	100	13.8%	6.8%	16.5%	8.7%
<b>Total 65+</b>	<b>2,297</b>	<b>2,764</b>	<b>3,380</b>	<b>4,141</b>	<b>4,779</b>	<b>20.3%</b>	<b>22.3%</b>	<b>22.5%</b>	<b>15.4%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

## Population Projections for Alaska Boroughs and Census Areas

**Table 41: Aleutians East population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>99</b>	<b>70</b>	<b>115</b>	<b>131</b>	<b>117</b>	<b>-29.3%</b>	<b>64.3%</b>	<b>13.9%</b>	<b>-10.7%</b>
<b>Seniors (Age 65+)</b>									
65-69	42	66	42	83	99	57.1%	-36.4%	97.6%	19.3%
70-74	18	26	48	27	67	44.4%	84.6%	-43.8%	148.1%
75-79	15	16	23	41	24	6.7%	43.8%	78.3%	-41.5%
80-84	8	11	12	17	31	37.5%	9.1%	41.7%	82.4%
85-89	4	5	7	8	12	25.0%	40.0%	14.3%	50.0%
90+	1	2	2	4	5	100.0%	0.0%	100.0%	25.0%
<b>Total 65+</b>	<b>88</b>	<b>126</b>	<b>134</b>	<b>180</b>	<b>238</b>	<b>43.2%</b>	<b>6.3%</b>	<b>34.3%</b>	<b>32.2%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 42: Aleutians West population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>228</b>	<b>291</b>	<b>313</b>	<b>322</b>	<b>295</b>	<b>27.6%</b>	<b>7.6%</b>	<b>2.9%</b>	<b>-8.4%</b>
<b>Seniors (Age 65+)</b>									
65-69	72	130	193	217	229	80.6%	48.5%	12.4%	5.5%
70-74	41	51	105	162	187	24.4%	105.9%	54.3%	15.4%
75-79	19	32	40	87	137	68.4%	25.0%	117.5%	57.5%
80-84	14	12	22	29	65	-14.3%	83.3%	31.8%	124.1%
85-89	6	10	8	16	22	66.7%	-20.0%	100.0%	37.5%
90+	1	2	4	4	8	100.0%	100.0%	0.0%	100.0%
<b>Total 65+</b>	<b>153</b>	<b>237</b>	<b>372</b>	<b>515</b>	<b>648</b>	<b>54.9%</b>	<b>57.0%</b>	<b>38.4%</b>	<b>25.8%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 43: Anchorage population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>14,679</b>	<b>17,484</b>	<b>18,324</b>	<b>17,178</b>	<b>14,106</b>	<b>19.1%</b>	<b>4.8%</b>	<b>-6.3%</b>	<b>-17.9%</b>
<b>Seniors (Age 65+)</b>									
65-69	8,825	13,331	16,029	16,859	15,643	51.1%	20.2%	5.2%	-7.2%
70-74	5,187	7,698	11,828	14,385	15,087	48.4%	53.7%	21.6%	4.9%
75-79	3,628	4,353	6,521	10,143	12,352	20.0%	49.8%	55.5%	21.8%
80-84	2,426	2,760	3,347	5,079	7,937	13.8%	21.3%	51.7%	56.3%
85-89	1,416	1,646	1,876	2,302	3,493	16.2%	14.0%	22.7%	51.7%
90+	802	1,018	1,220	1,403	1,694	26.9%	19.8%	15.0%	20.7%
<b>Total 65+</b>	<b>22,284</b>	<b>30,806</b>	<b>40,821</b>	<b>50,171</b>	<b>56,206</b>	<b>38.2%</b>	<b>32.5%</b>	<b>22.9%</b>	<b>12.0%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 44: Bethel population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>579</b>	<b>681</b>	<b>741</b>	<b>784</b>	<b>612</b>	<b>17.6%</b>	<b>8.8%</b>	<b>5.8%</b>	<b>-21.9%</b>
<b>Seniors (Age 65+)</b>									
65-69	439	500	592	648	693	13.9%	18.4%	9.5%	6.9%
70-74	224	369	425	509	564	64.7%	15.2%	19.8%	10.8%
75-79	183	165	283	331	406	-9.8%	71.5%	17.0%	22.7%
80-84	118	121	108	194	233	2.5%	-10.7%	79.6%	20.1%
85-89	56	66	70	64	118	17.9%	6.1%	-8.6%	84.4%
90+	39	37	40	44	42	-5.1%	8.1%	10.0%	-4.5%
<b>Total 65+</b>	<b>1,059</b>	<b>1,258</b>	<b>1,518</b>	<b>1,790</b>	<b>2,056</b>	<b>18.8%</b>	<b>20.7%</b>	<b>17.9%</b>	<b>14.9%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 45: Bristol Bay population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>57</b>	<b>71</b>	<b>101</b>	<b>58</b>	<b>27</b>	<b>24.6%</b>	<b>42.3%</b>	<b>-42.6%</b>	<b>-53.4%</b>
<b>Seniors (Age 65+)</b>									
65-69	40	42	55	83	44	5.0%	31.0%	50.9%	-47.0%
70-74	20	30	32	44	68	50.0%	6.7%	37.5%	54.5%
75-79	18	17	25	27	37	-5.6%	47.1%	8.0%	37.0%
80-84	6	11	11	17	20	83.3%	0.0%	54.5%	17.6%
85-89	6	3	6	6	10	-50.0%	100.0%	0.0%	66.7%
90+	0	1	0	1	2	0.0%	-100.0%	0.0%	100.0%
<b>Total 65+</b>	<b>90</b>	<b>104</b>	<b>129</b>	<b>178</b>	<b>181</b>	<b>15.6%</b>	<b>24.0%</b>	<b>38.0%</b>	<b>1.7%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 46: Denali population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>98</b>	<b>168</b>	<b>129</b>	<b>104</b>	<b>70</b>	<b>71.4%</b>	<b>-23.2%</b>	<b>-19.4%</b>	<b>-32.7%</b>
<b>Seniors (Age 65+)</b>									
65-69	76	87	152	116	94	14.5%	74.7%	-23.7%	-19.0%
70-74	41	64	75	133	103	56.1%	17.2%	77.3%	-22.6%
75-79	22	32	50	61	112	45.5%	56.3%	22.0%	83.6%
80-84	5	15	23	37	47	200.0%	53.3%	60.9%	27.0%
85-89	3	4	10	17	26	33.3%	150.0%	70.0%	52.9%
90+	2	2	2	6	10	0.0%	0.0%	200.0%	66.7%
<b>Total 65+</b>	<b>149</b>	<b>204</b>	<b>312</b>	<b>370</b>	<b>392</b>	<b>36.9%</b>	<b>52.9%</b>	<b>18.6%</b>	<b>5.9%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 47: Dillingham population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>185</b>	<b>258</b>	<b>279</b>	<b>259</b>	<b>187</b>	<b>39.5%</b>	<b>8.1%</b>	<b>-7.2%</b>	<b>-27.8%</b>
<b>Seniors (Age 65+)</b>									
65-69	139	157	223	242	225	12.9%	42.0%	8.5%	-7.0%
70-74	84	116	133	190	210	38.1%	14.7%	42.9%	10.5%
75-79	63	67	96	109	160	6.3%	43.3%	13.5%	46.8%
80-84	40	43	46	68	81	7.5%	7.0%	47.8%	19.1%
85-89	24	25	27	28	42	4.2%	8.0%	3.7%	50.0%
90+	8	12	14	15	17	50.0%	16.7%	7.1%	13.3%
<b>Total 65+</b>	<b>358</b>	<b>420</b>	<b>539</b>	<b>652</b>	<b>735</b>	<b>17.3%</b>	<b>28.3%</b>	<b>21.0%</b>	<b>12.7%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 48: Fairbanks population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>4,241</b>	<b>5,168</b>	<b>5,157</b>	<b>4,896</b>	<b>4,132</b>	<b>21.9%</b>	<b>-0.2%</b>	<b>-5.1%</b>	<b>-15.6%</b>
<b>Seniors (Age 65+)</b>									
65-69	2,549	3,860	4,739	4,752	4,503	51.4%	22.8%	0.3%	-5.2%
70-74	1,457	2,212	3,403	4,232	4,259	51.8%	53.8%	24.4%	0.6%
75-79	944	1,208	1,851	2,892	3,631	28.0%	53.2%	56.2%	25.6%
80-84	659	704	910	1,421	2,253	6.8%	29.3%	56.2%	58.6%
85-89	369	446	480	626	982	20.9%	7.6%	30.4%	56.9%
90+	207	265	326	362	454	28.0%	23.0%	11.0%	25.4%
<b>Total 65+</b>	<b>6,185</b>	<b>8,695</b>	<b>11,709</b>	<b>14,285</b>	<b>16,082</b>	<b>40.6%</b>	<b>34.7%</b>	<b>22.0%</b>	<b>12.6%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 49: Haines population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>205</b>	<b>198</b>	<b>174</b>	<b>130</b>	<b>103</b>	<b>-3.4%</b>	<b>-12.1%</b>	<b>-25.3%</b>	<b>-20.8%</b>
<b>Seniors (Age 65+)</b>									
65-69	115	187	177	157	120	62.6%	-5.3%	-11.3%	-23.6%
70-74	74	100	164	158	142	35.1%	64.0%	-3.7%	-10.1%
75-79	62	59	84	138	137	-4.8%	42.4%	64.3%	-0.7%
80-84	33	46	45	65	109	39.4%	-2.2%	44.4%	67.7%
85-89	28	20	29	28	43	-28.6%	45.0%	-3.4%	53.6%
90+	12	17	15	19	21	41.7%	-11.8%	26.7%	10.5%
<b>Total 65+</b>	<b>324</b>	<b>429</b>	<b>514</b>	<b>565</b>	<b>572</b>	<b>32.4%</b>	<b>19.8%</b>	<b>9.9%</b>	<b>1.2%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 50: Juneau population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>2,027</b>	<b>2,377</b>	<b>2,134</b>	<b>1,922</b>	<b>1,520</b>	<b>17.3%</b>	<b>-10.2%</b>	<b>-9.9%</b>	<b>-20.9%</b>
<b>Seniors (Age 65+)</b>									
65-69	1,126	1,827	2,156	1,942	1,763	62.3%	18.0%	-9.9%	-9.2%
70-74	692	967	1,593	1,903	1,737	39.7%	64.7%	19.5%	-8.7%
75-79	369	551	785	1,322	1,616	49.3%	42.5%	68.4%	22.2%
80-84	315	281	419	606	1,038	-10.8%	49.1%	44.6%	71.3%
85-89	178	200	180	273	407	12.4%	-10.0%	51.7%	49.1%
90+	132	142	156	149	198	7.6%	9.9%	-4.5%	32.9%
<b>Total 65+</b>	<b>2,812</b>	<b>3,968</b>	<b>5,289</b>	<b>6,195</b>	<b>6,759</b>	<b>41.1%</b>	<b>33.3%</b>	<b>17.1%</b>	<b>9.1%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 51: Kenai population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>3,431</b>	<b>4,353</b>	<b>4,201</b>	<b>3,446</b>	<b>2,791</b>	<b>26.9%</b>	<b>-3.5%</b>	<b>-18.0%</b>	<b>-19.0%</b>
<b>Seniors (Age 65+)</b>									
65-69	2,275	3,161	4,022	3,900	3,202	38.9%	27.2%	-3.0%	-17.9%
70-74	1,379	2,005	2,812	3,619	3,527	45.4%	40.2%	28.7%	-2.5%
75-79	941	1,141	1,673	2,387	3,108	21.3%	46.6%	42.7%	30.2%
80-84	622	721	878	1,306	1,885	15.9%	21.8%	48.7%	44.3%
85-89	380	428	495	609	910	12.6%	15.7%	23.0%	49.4%
90+	178	266	321	371	452	49.4%	20.7%	15.6%	21.8%
<b>Total 65+</b>	<b>5,775</b>	<b>7,722</b>	<b>10,201</b>	<b>12,192</b>	<b>13,084</b>	<b>33.7%</b>	<b>32.1%</b>	<b>19.5%</b>	<b>7.3%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 52: Ketchikan population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>816</b>	<b>927</b>	<b>921</b>	<b>699</b>	<b>531</b>	<b>13.6%</b>	<b>-0.6%</b>	<b>-24.1%</b>	<b>-24.0%</b>
<b>Seniors (Age 65+)</b>									
65-69	544	717	823	823	626	31.8%	14.8%	0.0%	-23.9%
70-74	353	478	635	736	746	35.4%	32.8%	15.9%	1.4%
75-79	198	271	377	517	614	36.9%	39.1%	37.1%	18.8%
80-84	176	151	205	290	406	-14.2%	35.8%	41.5%	40.0%
85-89	105	118	102	139	199	12.4%	-13.6%	36.3%	43.2%
90+	60	69	80	75	94	15.0%	15.9%	-6.3%	25.3%
<b>Total 65+</b>	<b>1,436</b>	<b>1,804</b>	<b>2,222</b>	<b>2,580</b>	<b>2,685</b>	<b>25.6%</b>	<b>23.2%</b>	<b>16.1%</b>	<b>4.1%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 53: Kodiak population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>708</b>	<b>754</b>	<b>838</b>	<b>821</b>	<b>702</b>	<b>6.5%</b>	<b>11.1%</b>	<b>-2.0%</b>	<b>-14.5%</b>
<b>Seniors (Age 65+)</b>									
65-69	398	620	667	749	732	55.8%	7.6%	12.3%	-2.3%
70-74	239	346	549	597	671	44.8%	58.7%	8.7%	12.4%
75-79	151	190	281	459	503	25.8%	47.9%	63.3%	9.6%
80-84	78	100	130	203	345	28.2%	30.0%	56.2%	70.0%
85-89	44	51	65	86	137	15.9%	27.5%	32.3%	59.3%
90+	40	37	40	49	63	-7.5%	8.1%	22.5%	28.6%
<b>Total 65+</b>	<b>950</b>	<b>1,344</b>	<b>1,732</b>	<b>2,143</b>	<b>2,451</b>	<b>41.5%</b>	<b>28.9%</b>	<b>23.7%</b>	<b>14.4%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 54: Lake and Pen population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>78</b>	<b>76</b>	<b>114</b>	<b>89</b>	<b>46</b>	<b>-2.6%</b>	<b>50.0%</b>	<b>-21.9%</b>	<b>-48.3%</b>
<b>Seniors (Age 65+)</b>									
65-69	56	65	65	99	79	16.1%	0.0%	52.3%	-20.2%
70-74	38	47	55	56	85	23.7%	17.0%	1.8%	51.8%
75-79	23	31	37	45	47	34.8%	19.4%	21.6%	4.4%
80-84	10	16	22	25	32	60.0%	37.5%	13.6%	28.0%
85-89	7	6	10	14	17	-14.3%	66.7%	40.0%	21.4%
90+	3	4	3	5	7	33.3%	-25.0%	66.7%	40.0%
<b>Total 65+</b>	<b>137</b>	<b>169</b>	<b>192</b>	<b>244</b>	<b>267</b>	<b>23.4%</b>	<b>13.6%</b>	<b>27.1%</b>	<b>9.4%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 55: Mat-su population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>3,983</b>	<b>5,556</b>	<b>6,113</b>	<b>5,941</b>	<b>5,366</b>	<b>39.5%</b>	<b>10.0%</b>	<b>-2.8%</b>	<b>-9.7%</b>
<b>Seniors (Age 65+)</b>									
65-69	2,519	3,657	5,108	5,648	5,529	45.2%	39.7%	10.6%	-2.1%
70-74	1,633	2,307	3,343	4,682	5,233	41.3%	44.9%	40.1%	11.8%
75-79	1,116	1,401	1,975	2,889	4,090	25.5%	41.0%	46.3%	41.6%
80-84	736	889	1,113	1,581	2,336	20.8%	25.2%	42.0%	47.8%
85-89	391	518	626	789	1,128	32.5%	20.8%	26.0%	43.0%
90+	186	280	378	466	590	50.5%	35.0%	23.3%	26.6%
<b>Total 65+</b>	<b>6,581</b>	<b>9,052</b>	<b>12,543</b>	<b>16,055</b>	<b>18,906</b>	<b>37.5%</b>	<b>38.6%</b>	<b>28.0%</b>	<b>17.8%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 56: Nome population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>375</b>	<b>466</b>	<b>466</b>	<b>401</b>	<b>324</b>	<b>24.3%</b>	<b>0.0%</b>	<b>-13.9%</b>	<b>-19.2%</b>
<b>Seniors (Age 65+)</b>									
65-69	238	319	402	404	350	34.0%	26.0%	0.5%	-13.4%
70-74	146	198	268	344	352	35.6%	35.4%	28.4%	2.3%
75-79	107	110	152	208	276	2.8%	38.2%	36.8%	32.7%
80-84	74	71	73	104	147	-4.1%	2.8%	42.5%	41.3%
85-89	33	42	40	42	63	27.3%	-4.8%	5.0%	50.0%
90+	21	20	24	24	25	-4.8%	20.0%	0.0%	4.2%
<b>Total 65+</b>	<b>619</b>	<b>760</b>	<b>959</b>	<b>1,126</b>	<b>1,213</b>	<b>22.8%</b>	<b>26.2%</b>	<b>17.4%</b>	<b>7.7%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 57: North Slope population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>263</b>	<b>358</b>	<b>392</b>	<b>340</b>	<b>274</b>	<b>36.1%</b>	<b>9.5%</b>	<b>-13.3%</b>	<b>-19.4%</b>
<b>Seniors (Age 65+)</b>									
65-69	176	224	308	340	299	27.3%	37.5%	10.4%	-12.1%
70-74	106	149	191	267	299	40.6%	28.2%	39.8%	12.0%
75-79	66	80	114	149	215	21.2%	42.5%	30.7%	44.3%
80-84	42	44	53	79	107	4.8%	20.5%	49.1%	35.4%
85-89	19	24	25	30	48	26.3%	4.2%	20.0%	60.0%
90+	10	11	13	14	18	10.0%	18.2%	7.7%	28.6%
<b>Total 65+</b>	<b>419</b>	<b>532</b>	<b>704</b>	<b>879</b>	<b>986</b>	<b>27.0%</b>	<b>32.3%</b>	<b>24.9%</b>	<b>12.2%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 58: NW Arctic population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>251</b>	<b>263</b>	<b>306</b>	<b>302</b>	<b>266</b>	<b>4.8%</b>	<b>16.3%</b>	<b>-1.3%</b>	<b>-11.9%</b>
<b>Seniors (Age 65+)</b>									
65-69	148	212	223	263	262	43.2%	5.2%	17.9%	-0.4%
70-74	106	123	178	190	227	16.0%	44.7%	6.7%	19.5%
75-79	89	77	92	138	150	-13.5%	19.5%	50.0%	8.7%
80-84	58	59	50	62	98	1.7%	-15.3%	24.0%	58.1%
85-89	28	33	33	27	36	17.9%	0.0%	-18.2%	33.3%
90+	9	14	18	19	18	55.6%	28.6%	5.6%	-5.3%
<b>Total 65+</b>	<b>438</b>	<b>518</b>	<b>594</b>	<b>699</b>	<b>791</b>	<b>18.3%</b>	<b>14.7%</b>	<b>17.7%</b>	<b>13.2%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 59: Prince of Wales-OuterKet population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>321</b>	<b>412</b>	<b>367</b>	<b>299</b>	<b>188</b>	<b>28.3%</b>	<b>-10.9%</b>	<b>-18.5%</b>	<b>-37.1%</b>
<b>Seniors (Age 65+)</b>									
65-69	266	283	368	328	272	6.4%	30.0%	-10.9%	-17.1%
70-74	152	224	242	320	291	47.4%	8.0%	32.2%	-9.1%
75-79	91	122	182	199	270	34.1%	49.2%	9.3%	35.7%
80-84	57	65	87	134	150	14.0%	33.8%	54.0%	11.9%
85-89	28	33	38	54	85	17.9%	15.2%	42.1%	57.4%
90+	6	12	18	21	30	100.0%	50.0%	16.7%	42.9%
<b>Total 65+</b>	<b>600</b>	<b>739</b>	<b>935</b>	<b>1,056</b>	<b>1,098</b>	<b>23.2%</b>	<b>26.5%</b>	<b>12.9%</b>	<b>4.0%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 60: Sitka population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>512</b>	<b>560</b>	<b>606</b>	<b>453</b>	<b>308</b>	<b>9.4%</b>	<b>8.2%</b>	<b>-25.2%</b>	<b>-32.0%</b>
<b>Seniors (Age 65+)</b>									
65-69	334	448	495	539	404	34.1%	10.5%	8.9%	-25.0%
70-74	286	296	398	444	489	3.5%	34.5%	11.6%	10.1%
75-79	168	232	241	331	376	38.1%	3.9%	37.3%	13.6%
80-84	131	129	176	188	262	-1.5%	36.4%	6.8%	39.4%
85-89	85	98	97	129	138	15.3%	-1.0%	33.0%	7.0%
90+	46	58	68	71	89	26.1%	17.2%	4.4%	25.4%
<b>Total 65+</b>	<b>1,050</b>	<b>1,261</b>	<b>1,475</b>	<b>1,702</b>	<b>1,758</b>	<b>20.1%</b>	<b>17.0%</b>	<b>15.4%</b>	<b>3.3%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 61: Skag-Hoon-Ang population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>240</b>	<b>263</b>	<b>220</b>	<b>160</b>	<b>101</b>	<b>9.6%</b>	<b>-16.3%</b>	<b>-27.3%</b>	<b>-36.9%</b>
<b>Seniors (Age 65+)</b>									
65-69	150	213	237	200	146	42.0%	11.3%	-15.6%	-27.0%
70-74	94	128	185	209	179	36.2%	44.5%	13.0%	-14.4%
75-79	52	75	103	152	177	44.2%	37.3%	47.6%	16.4%
80-84	33	38	54	78	118	15.2%	42.1%	44.4%	51.3%
85-89	20	19	23	33	51	-5.0%	21.1%	43.5%	54.5%
90+	10	12	12	14	20	20.0%	0.0%	16.7%	42.9%
<b>Total 65+</b>	<b>359</b>	<b>485</b>	<b>614</b>	<b>686</b>	<b>691</b>	<b>35.1%</b>	<b>26.6%</b>	<b>11.7%</b>	<b>0.7%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 62: SE Fairbanks population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>404</b>	<b>483</b>	<b>474</b>	<b>393</b>	<b>320</b>	<b>19.6%</b>	<b>-1.9%</b>	<b>-17.1%</b>	<b>-18.6%</b>
<b>Seniors (Age 65+)</b>									
65-69	302	369	444	436	360	22.2%	20.3%	-1.8%	-17.4%
70-74	217	280	344	415	411	29.0%	22.9%	20.6%	-1.0%
75-79	114	181	237	294	356	58.8%	30.9%	24.1%	21.1%
80-84	68	83	135	178	225	22.1%	62.7%	31.9%	26.4%
85-89	30	45	55	90	122	50.0%	22.2%	63.6%	35.6%
90+	17	23	32	42	63	35.3%	39.1%	31.3%	50.0%
<b>Total 65+</b>	<b>748</b>	<b>981</b>	<b>1,247</b>	<b>1,455</b>	<b>1,537</b>	<b>31.1%</b>	<b>27.1%</b>	<b>16.7%</b>	<b>5.6%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 63: Valdez-Cordova population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>601</b>	<b>760</b>	<b>703</b>	<b>533</b>	<b>371</b>	<b>26.5%</b>	<b>-7.5%</b>	<b>-24.2%</b>	<b>-30.4%</b>
<b>Seniors (Age 65+)</b>									
65-69	383	534	681	631	481	39.4%	27.5%	-7.3%	-23.8%
70-74	217	319	456	592	556	47.0%	42.9%	29.8%	-6.1%
75-79	110	168	255	372	496	52.7%	51.8%	45.9%	33.3%
80-84	90	76	119	188	284	-15.6%	56.6%	58.0%	51.1%
85-89	58	60	52	81	129	3.4%	-13.3%	55.8%	59.3%
90+	27	36	40	37	53	33.3%	11.1%	-7.5%	43.2%
<b>Total 65+</b>	<b>885</b>	<b>1,193</b>	<b>1,603</b>	<b>1,901</b>	<b>1,999</b>	<b>34.8%</b>	<b>34.4%</b>	<b>18.6%</b>	<b>5.2%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 64: WadeHampton population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>190</b>	<b>208</b>	<b>263</b>	<b>253</b>	<b>229</b>	<b>9.5%</b>	<b>26.4%</b>	<b>-3.8%</b>	<b>-9.5%</b>
<b>Seniors (Age 65+)</b>									
65-69	131	162	178	227	221	23.7%	9.9%	27.5%	-2.6%
70-74	106	110	136	151	194	3.8%	23.6%	11.0%	28.5%
75-79	90	78	82	103	118	-13.3%	5.1%	25.6%	14.6%
80-84	45	59	51	54	71	31.1%	-13.6%	5.9%	31.5%
85-89	27	25	33	28	31	-7.4%	32.0%	-15.2%	10.7%
90+	13	16	16	19	19	23.1%	0.0%	18.8%	0.0%
<b>Total 65+</b>	<b>412</b>	<b>450</b>	<b>496</b>	<b>582</b>	<b>654</b>	<b>9.2%</b>	<b>10.2%</b>	<b>17.3%</b>	<b>12.4%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 65: Wrangell-Petersburg population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>	<b>403</b>	<b>442</b>	<b>451</b>	<b>317</b>	<b>234</b>	<b>9.7%</b>	<b>2.0%</b>	<b>-29.7%</b>	<b>-26.2%</b>
<b>Seniors (Age 65+)</b>									
65-69	307	361	396	407	288	17.6%	9.7%	2.8%	-29.2%
70-74	186	262	310	345	360	40.9%	18.3%	11.3%	4.3%
75-79	109	150	213	258	292	37.6%	42.0%	21.1%	13.2%
80-84	96	79	109	160	198	-17.7%	38.0%	46.8%	23.8%
85-89	60	57	47	69	103	-5.0%	-17.5%	46.8%	49.3%
90+	39	39	36	31	41	0.0%	-7.7%	-13.9%	32.3%
<b>Total 65+</b>	<b>797</b>	<b>948</b>	<b>1,111</b>	<b>1,270</b>	<b>1,282</b>	<b>18.9%</b>	<b>17.2%</b>	<b>14.3%</b>	<b>0.9%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 66: Yakutat population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>37</b>	<b>51</b>	<b>35</b>	<b>37</b>	<b>33</b>	<b>37.8%</b>	<b>-31.4%</b>	<b>5.7%</b>	<b>-10.8%</b>
<b>Seniors (Age 65+)</b>									
65-69	20	33	45	30	33	65.0%	36.4%	-33.3%	10.0%
70-74	19	17	29	39	28	-10.5%	70.6%	34.5%	-28.2%
75-79	8	15	14	24	33	87.5%	-6.7%	71.4%	37.5%
80-84	9	6	11	11	19	-33.3%	83.3%	0.0%	72.7%
85-89	3	6	4	7	7	100.0%	-33.3%	75.0%	0.0%
90+	0	1	3	3	4	0.0%	200.0%	0.0%	33.3%
<b>Total 65+</b>	<b>59</b>	<b>78</b>	<b>106</b>	<b>114</b>	<b>124</b>	<b>24.4%</b>	<b>26.4%</b>	<b>7.0%</b>	<b>8.1%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 67: Yukon-Koyukuk population projections by age cohort (age 60+), 2015-2030**

Age	Population Projections					Percent Change			
	2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30
<b>Pre-seniors (Age 60-64)</b>									
	<b>348</b>	<b>363</b>	<b>380</b>	<b>292</b>	<b>181</b>	<b>4.3%</b>	<b>4.7%</b>	<b>-23.2%</b>	<b>-38.0%</b>
<b>Seniors (Age 65+)</b>									
65-69	202	300	315	332	257	48.5%	5.0%	5.4%	-22.6%
70-74	136	169	256	271	291	19.5%	34.0%	5.5%	6.9%
75-79	98	102	130	204	220	4.1%	27.5%	56.9%	7.8%
80-84	77	65	69	90	148	-15.6%	6.2%	30.4%	64.4%
85-89	27	45	37	40	55	66.7%	-17.8%	8.1%	37.5%
90+	17	16	24	24	25	-5.9%	50.0%	0.0%	4.2%
<b>Total 65+</b>	<b>557</b>	<b>697</b>	<b>831</b>	<b>961</b>	<b>996</b>	<b>25.1%</b>	<b>19.2%</b>	<b>15.6%</b>	<b>3.6%</b>

Source: Alaska Department of Labor & Workforce Development, Research and Analysis Section, Demographics Unit

**Table 68: Projected change in veteran population age 65+ by place, 2010-2030**

Region	Borough /Census Area	Population Projection					Percent Change				
		2010	2015	2020	2025	2030	2010-15	2015-20	2020-25	2025-30	2010-30
<b>Anc/Mat-Su</b>	Anchorage Municipality, AK	6,881	9,278	9,805	9,890	10,033	34.8%	5.7%	0.9%	1.5%	45.8%
	Matanuska-Susitna Borough, AK	2,786	3,778	4,223	4,383	4,152	35.6%	11.8%	3.8%	-5.3%	49.0%
	<b>Mat-Su Region Total Est.</b>	<b>9,667</b>	<b>13,056</b>	<b>14,028</b>	<b>14,273</b>	<b>14,186</b>	<b>35.1%</b>	<b>7.4%</b>	<b>1.8%</b>	<b>-0.6%</b>	<b>46.7%</b>
<b>Southeast</b>	Haines Borough, AK	172	244	287	308	316	42.1%	17.6%	7.3%	2.5%	83.7%
	Juneau City and Borough, AK	1,071	1,475	1,554	1,624	1,557	37.8%	5.3%	4.5%	-4.1%	45.5%
	Ketchikan Gateway Borough, AK	518	659	684	647	638	27.1%	3.9%	-5.4%	-1.4%	23.2%
	Prince of Wales-Outer Ketchikan CA, AK	283	407	426	404	393	43.8%	4.7%	-5.3%	-2.7%	38.7%
	Sitka City and Borough, AK	460	617	690	792	895	34.3%	11.8%	14.7%	13.0%	94.6%
	Skagway-Hoonah-Angoon Census Area, AK*	168	235	273	290	268	39.8%	16.4%	6.0%	-7.4%	59.7%
	Wrangell-Petersburg Census Area, AK**	454	622	707	771	715	37.2%	13.7%	8.9%	-7.2%	57.6%
	Yakutat City and Borough, AK	17	25	32	36	35	49.0%	24.9%	11.6%	-2.4%	102.7%
<b>Southeast Region Total Est.</b>	<b>3,142</b>	<b>4,285</b>	<b>4,654</b>	<b>4,870</b>	<b>4,817</b>	<b>36.4%</b>	<b>8.6%</b>	<b>4.7%</b>	<b>-1.1%</b>	<b>53.3%</b>	
<b>Gulf Coast</b>	Kenai Peninsula Borough, AK	2,215	3,094	3,394	3,520	3,478	39.7%	9.7%	3.7%	-1.2%	57.0%
	Kodiak Island Borough, AK	191	260	278	298	266	36.2%	6.8%	7.4%	-10.7%	39.6%
	Valdez-Cordova Census Area, AK	320	462	509	495	506	44.5%	10.1%	-2.7%	2.2%	58.2%
	<b>Gulf Coast Region Total Est.</b>	<b>2,726</b>	<b>3,817</b>	<b>4,181</b>	<b>4,314</b>	<b>4,250</b>	<b>40.0%</b>	<b>9.5%</b>	<b>3.2%</b>	<b>-1.5%</b>	<b>55.9%</b>
<b>Interior</b>	Denali Borough, AK	59	81	84	97	105	36.8%	4.3%	14.8%	8.0%	77.0%
	Fairbanks North Star Borough, AK	2,203	2,850	2,801	2,701	2,561	29.4%	-1.7%	-3.6%	-5.2%	16.2%
	Southeast Fairbanks Census Area, AK	284	400	425	432	466	41.0%	6.3%	1.7%	7.7%	64.3%
	Yukon-Koyukuk Census Area, AK	134	193	215	211	215	43.6%	11.6%	-2.0%	2.2%	60.5%
	<b>Interior Region Total Est.</b>	<b>2,680</b>	<b>3,524</b>	<b>3,525</b>	<b>3,441</b>	<b>3,346</b>	<b>31.5%</b>	<b>0.0%</b>	<b>-2.4%</b>	<b>-2.8%</b>	<b>24.9%</b>
<b>Southwest</b>	Aleutians East Borough, AK	58	80	95	105	104	38.1%	17.5%	11.0%	-0.9%	78.5%
	Aleutians West Census Area, AK	26	37	40	44	44	43.5%	7.1%	9.6%	1.9%	71.5%
	Bethel Census Area, AK	223	312	362	395	406	40.1%	16.1%	9.2%	2.7%	82.3%
	Bristol Bay Borough, AK	64	91	126	136	142	42.7%	38.5%	7.4%	4.5%	121.9%
	Dillingham Census Area, AK	77	106	114	124	130	37.6%	7.2%	8.9%	4.3%	67.7%
	Lake and Peninsula Borough, AK	35	49	56	61	67	38.5%	14.9%	9.3%	9.5%	90.6%
	Wade Hampton Census Area, AK	70	93	103	103	112	33.8%	11.1%	-0.4%	8.7%	60.9%
	<b>Southwest Region Total Est.</b>	<b>553</b>	<b>769</b>	<b>896</b>	<b>968</b>	<b>1,005</b>	<b>39.1%</b>	<b>16.5%</b>	<b>8.0%</b>	<b>3.8%</b>	<b>81.7%</b>
<b>Northern</b>	Nome Census Area, AK	219	332	381	348	314	51.4%	14.7%	-8.7%	-9.9%	42.9%
	North Slope Borough, AK	92	120	129	141	161	31.4%	7.0%	9.5%	14.1%	75.6%
	Northwest Arctic Borough, AK	133	186	212	233	250	40.2%	14.1%	9.7%	7.2%	88.1%
	<b>Northern Region Total Est.</b>	<b>444</b>	<b>639</b>	<b>722</b>	<b>722</b>	<b>724</b>	<b>43.9%</b>	<b>13.1%</b>	<b>0.0%</b>	<b>0.3%</b>	<b>63.2%</b>

Note: Population estimates as of Sept. 30. \*Estimates do not break out the Skagway Borough. \*\*Estimates do not separate Wrangell from Petersburg. Source: U.S. Dept. of Veterans Affairs, ADOLWD



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