# NDSU EXTENSION EC1673 June 2013 Ramona Danielson

# NORTH DAKOTA'S AGING POPULATION: PROFILE AND TRENDS OF SENIORS AGES 65 AND OLDER



## POPULATION

Until the latter part of the 2000s, the "graying of North Dakota" seemed relatively certain; decades of population loss or mixed growth in most counties<sup>2</sup>, the aging of the baby boomers (born 1946 through 1964) and improvements in life expectancy led to predictions of increasingly high proportions of elderly in counties throughout the state.

More recently, however, energy development in western North Dakota has contributed to population growth in some areas of the state and demographic shifts across the state. Although proportions are not expected to reach as high of levels as previously projected, the senior population has been growing in the state and will continue to do so.

The leading edge of the baby boom began to turn 65 in 2011. That year, 14.4 percent of North Dakota's population was ages 65 and older (98,595 people), the 12th highest proportion in the nation<sup>3</sup>. In 16 of the state's 53 counties, the proportion was at least

23 percent<sup>3</sup>. **Figure 1** offers a national comparison using 2010 data<sup>4</sup>. By 2025, 26 counties are expected to have at least 23 percent seniors<sup>2</sup>.

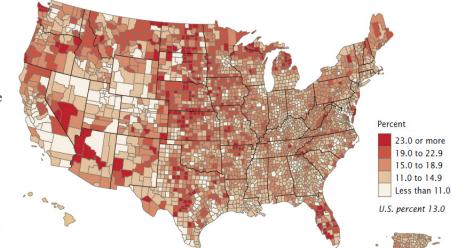
Statewide, the number of seniors is expected to increase 50 percent (from 98,595 in 2011 to 148,060 in 2025), with the overall state proportion rising to 17.6 percent<sup>2,3</sup>. In western North Dakota, McKenzie, Williams and Divide counties are expected to more than double their numbers of seniors from 2011 to 2025 (see Figure 2)<sup>2,3</sup>. OVERVIEW: This aging population brief presents a picture of the health, finances and well-being of adults ages 65 and older in North Dakota. The brief focuses on well-being indicators<sup>1</sup> including population, health care, economics, health risks and behaviors, and health status, as well as cognitive impairment and caregiving.

In 2011, North Dakota had the second highest proportion of older seniors ages 85 and older in the nation at 2.5 percent<sup>3</sup>. The number of these older seniors more than doubled from 1980 to 2011 (from 8,140 to 17,216 residents), but it is expected to stay fairly stable during the next 14 years<sup>2,3,5</sup>.

In 2010, North Dakota had 221 residents age 100 and older (more than double the 103 residents in 1980); 90 percent of these centenarians were women (up from 69 percent in  $1980)^5$ .

The vast majority of North Dakota residents ages 65 and older live in households (93 percent); one in four of all households has at least one senior (24 percent)<sup>6</sup>. Of the more than 61,000 heads of households (householders) who are seniors, half live alone (second highest proportion in the nation); nationally, 44 percent live alone<sup>6</sup>. Proportions living alone range from a high of 62 percent in Nelson County to a low of 30 percent in Slope County (**see Table 1**)<sup>6</sup>. Among householders living alone, 72 percent are female<sup>6</sup>.





Prepared by the Center for Social Research at NDSU for NDSU Extension Service. NDSU is an EO/AA institution. For more information, contact Jane Strommen (1701) 231-5948 or Jane.Strommen@ndsu.edu. For more information on this and other topics, see www.ag.ndsu.edu. NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit www.ag.ndsu.edu/agcomm/creative-commons. County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, ratical status, national origin, public assistance status, sex, sexual orientation, status as a U.S. veteran, race or religion. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-77881.

#### POPULATION CONTINUED

More than half of North Dakota seniors are married (57 percent), 31 percent are widowed, 7 percent are divorced and 5 percent never married<sup>6</sup>. Approximately 1 percent of seniors live with grandchildren; about one in four of these seniors is responsible for the care of his or her grandchildren<sup>6</sup>.

Among seniors in 2010, the state had 77 men for every 100 women<sup>5</sup>. Most North Dakota residents ages 65 and older are non-Hispanic white (97 percent compared with 89 percent of all North Dakotans)<sup>6</sup>. Twice the proportion of North Dakota seniors are veterans compared with the overall population (22 percent compared with 11 percent)<sup>6</sup>. Educational attainment among seniors is less than that of the overall state population: 27 percent have less than a high school diploma, compared with 10 percent overall, and 14 percent have a bachelor's degree or higher, compared with 27 percent<sup>6</sup>.

Most seniors have not moved in the previous year (93 percent compared with 83 percent of all North Dakotans)<sup>6</sup>. Less than three-fourths of senior households are owner-occupied (73 percent, which is the fourth lowest proportion in the nation); nationally, 79 percent are owner-occupied<sup>6</sup>. Rates of owner-occupied senior households range from a low of 62 percent in Ransom County to a high of 90 percent in Dunn County<sup>6</sup>.

# HEALTH CARE

In the United States, most seniors are eligible for Medicare, which is a federal health insurance program that helps with but does not cover all medical costs<sup>7</sup>. In North Dakota, 97 percent of seniors have some kind of health-care coverage<sup>8</sup>. Access to health-care services is an issue in North Dakota: 35 percent of all North Dakotans live in a primary health-care professional shortage area<sup>9</sup>.

About 6 percent of North Dakota seniors live in skilled nursing facilities (5,833 seniors in 2010)<sup>5</sup>. The majority of these residents are ages 85 and older<sup>5</sup>. Approximately 10 percent of North Dakota residents ages 65 and older had at least one nursing home stay in 2009, and 30 percent of residents ages 85 and older had at least one stay<sup>10</sup>. Two-thirds of nursing home residents are female<sup>10</sup>.

### ECONOMICS

Many North Dakota senior householders experience costburdened housing (monthly housing costs of at least 30 percent of their household income) (see Table 1)<sup>6</sup>. Among North Dakota households owned by seniors, 21 percent are cost-burdened; nationally, 29 percent are cost-burdened<sup>6</sup>. Rates range from 30 percent in McIntosh County to 7 percent in Billings County<sup>6</sup>. Among senior households renting, 47 percent are cost-burdened; nationally, 54 percent are costburdened<sup>6</sup>. Rates are as high as 80 percent in Pierce County<sup>6</sup>.

According to results of a 2012 statewide housing survey of key leaders and stakeholders, those surveyed are moderately in agreement that escalating housing costs are forcing elderly and low-income families to move; respondents in oil-impacted areas of western North Dakota strongly agreed that this is a problem<sup>2</sup>. Respondents indicated that elderly needing skilled-care facilities are getting their needs met moderately well and better than elderly wanting to age in place at home<sup>2</sup>.

The poverty rate among North Dakota seniors for whom poverty has been determined (for example, seniors living in group quarters are excluded) is 12 percent, which is the same as the overall state poverty rate. Eleven counties have at least 20 percent of their seniors living in poverty (see Table 1)<sup>6</sup>.

The North Dakota retirement ratio (people ages 65 and older as a proportion of those 20 to 64) was 24 percent in 2010 (ninth highest ratio in the nation); nationally, the ratio was 22 percent<sup>5</sup>. The ratio ranged from 14 percent in Sioux County to 73 percent in McIntosh County (**see Table 1**)<sup>5</sup>. One in three seniors ages 65 to 74 and one in four seniors ages 75 and older did volunteer work in the previous year<sup>11</sup>.

Nearly one in five seniors is in the labor force (19 percent)<sup>6</sup>. Senior households receive income from a variety of sources<sup>6</sup>:

- Social Security 94 percent (mean = \$15,714)
- Earnings 36 percent (mean = \$33,219)
- Retirement income 31 percent (mean = \$17,236)
- Supplemental Security 3 percent (mean = \$8,030)
- Cash public assistance 1 percent (mean = \$3,005)

In addition, 6 percent received Food Stamp/Supplemental Nutrition Assistance Program benefits<sup>6</sup>.



#### FIGURE 2. PROJECTED PERCENT CHANGE IN NORTH DAKOTA RESIDENTS AGES 65 AND OLDER BY COUNTY: 2011 TO 2025<sup>2,3</sup>

## HEALTH RISKS, BEHAVIORS AND STATUS

Health risk factors among North Dakota seniors include low physical activity (89 percent), high rates of being overweight (42 percent) and obese (24 percent), high blood pressure (57 percent), not getting a flu shot (42 percent) or a pneumonia vaccine (30 percent), being limited in activities (31 percent), low levels of education (27 percent), and poverty (12 percent) (see Figure 3)<sup>8</sup>.

Half of North Dakota residents ages 65 and older have arthritis, nearly one in three has vision impairment (31 percent) and one in five has diabetes (19 percent)<sup>8</sup>. Nearly one in three seniors reports being limited in activities because of physical, mental or emotional problems (31 percent); 16 percent require the use of special equipment<sup>8</sup>.

More than one-third of noninstitutionalized seniors report having a disability (35 percent)<sup>12</sup>. Difficulties include ambulatory (20 percent), hearing (16 percent), independent living (13 percent), vision (7 percent), cognitive (6 percent) and self-care (5 percent)<sup>12</sup>.

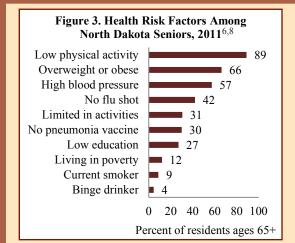
Among calls North Dakota seniors make for emergency medical services, the vast majority are for falls (2,779 calls in 2008, which is 87 percent of all calls by seniors)<sup>13</sup>. In 2011, 68 deaths were attributed to falls among North Dakota seniors ages 70 and older<sup>13</sup>.

## COGNITIVE IMPAIRMENT

Among North Dakota nursing home residents in 2009, nearly half (47 percent) had severe or moderate cognitive impairment, and an additional 31 percent had mild or very mild impairment<sup>10</sup>. Alzheimer's disease is the most common form. In 2010, about 18,000 North Dakota residents ages 65 and older were living with Alzheimer's disease: 700 ages 65 to 74, 7,700 ages 75 to 84, and 9,800 ages 85 and older<sup>14</sup>. Nationally, an estimated one in nine people ages 65 and older have the disease<sup>14</sup>. Alzheimer's disease is the fifth leading cause of death in the United States among seniors and continues to increase as a cause of death, while causes such as stroke and heart disease are decreasing in prevalence<sup>14</sup>.

## CAREGIVING

Nationally, about one in seven people with Alzheimer's and other dementias lives alone; many do not have someone providing care to them, putting them at higher risk of issues such as malnutrition, inadequate self-care and accidental death<sup>15</sup>. In North Dakota, an estimated 28,000 informal caregivers provided 32 million hours of unpaid dementia care in 2012, with a value of \$400 million<sup>14</sup>.



Notes: low physical activity = not participating in enough aerobic and muscle-strengthening exercise to meet guidelines; low education = less than a high school diploma; current smoker = every day or occasionally

#### Sources

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Research shows that, nationally, two-thirds of seniors with long-term care needs rely exclusively on informal caregiving by friends and family; half of seniors in need of long-term care who do not have a family caregiver are in nursing homes, compared with 7 percent who have a family caregiver<sup>16</sup>. Informal care includes hands-on health provision, care management, companionship, decision making and advocacy<sup>16</sup>. The majority of informal care is provided by women; the average caregiver is in her mid-40s, married and working outside the home<sup>16</sup>. In addition to the expenses of caregiving, caregiving responsibilities can lead to financial hardship through lost wages from reduced work hours, passing on a promotion, taking a leave of absence, time out of the workforce and early retirement, which all can impact retirement income down the road<sup>16</sup>.

In federal fiscal year 2012, 515 new cases of vulnerable adults in North Dakota who had been subjected to (or were at risk of) abuse or neglect were reported; of those, 77 percent were adults ages 60 and older<sup>17</sup>. More than half of all cases (60 percent) were determined to be self-neglect; the remaining cases were neglect, abuse or financial exploitation (by a child in 43 percent of cases, a spouse in 16 percent of cases and some other person in 39 percent of cases)<sup>17</sup>. More than one-third of new cases involved adults with Alzheimer's disease or dementia<sup>17</sup>.

		Retire-	Population Ages 65+					Householders Ages 65+		
						% Change	% in	% Living	Cost-Burdened^	
	Total	ment		% of Total	Projected	in Number	Poverty#	Alone		-2011 <sup>6</sup>
Location	Population 2011 <sup>3</sup>	<b>Ratio*</b> 2010 <sup>5</sup>	Number 2011 <sup>3</sup>	Population 2011	Number 2025 <sup>2</sup>	2011 to 2025	2007- 2011 <sup>6</sup>	2007- 2011 <sup>6</sup>	% Owner- Occupied	% Renter- Occupied
North Dakota	683,932	24.2%	98,595	14.4%	148,060	50.2%	12.2%	49.5%	21.1%	46.8%
Adams	2,307	44.2%	569	24.7%	673	18.3%	10.1%	52.9%	9.7%	26.8%
Barnes	11,056	34.6%	2,146	19.4%	2,911	35.6%	14.3%	53.3%	21.5%	41.9%
Benson	6,723	25.3%	850	12.6%	869	2.2%	20.1%	38.7%	20.1%	35.3%
Billings	816	31.5%	126	15.4%	250	98.4%	3.4%	40.0%	6.5%	0.0%
Bottineau	6,443	38.3%	1,359	21.1%	2,259	66.2%	12.8%	54.1%	18.2%	51.3%
Bowman	3,134	40.0%	657	21.0%	968	47.3%	17.5%	55.2%	19.9%	38.3%
Burke	2,033	36.8%	399	19.6%	580	45.4%	7.4%	56.2%	16.2%	26.4%
Burleigh	83,145	22.0%	11,356	13.7%	18,408	62.1%	9.4%	46.8%	19.5%	53.1%
Cass	152,368	15.0%	15,076	9.9%	28,291	87.7%	9.0%	52.9%	21.8%	54.3%
Cavalier	3,939	48.4%	1,011	25.7%	865	-14.4%	15.8%	42.9%	18.5%	42.7%
Dickey	5,317	42.4%	1,180	22.2%	1,461	23.8%	15.8%	55.7%	17.7%	64.9%
Divide	2,125	48.8%	551	25.9%	1,141	107.1%	6.8%	46.0%	17.5%	12.1%
Dunn	3,720	29.7%	616	16.6%	914	48.4%	10.0%	48.9%	13.9%	13.9%
Eddy	2,380	46.7%	581	24.4%	672	15.7%	21.3%	54.6%	19.3%	35.6%
Emmons	3,546	55.4%	979	27.6%	930	-5.0%	23.5%	48.9%	28.0%	27.6%
Foster	3,341	42.6%	743	22.2%	810	9.0%	14.2%	42.7%	23.2%	46.6%
Golden Valley	1,752	40.5%	358	20.4%	513	43.3%	10.2%	57.9%	12.7%	53.7%
Grand Forks	66,598	16.1%	7,047	10.6%	11,389	61.6%	10.7%	54.3%	28.6%	49.7%
Grant	2,337	50.7%	649	27.8%	647	-0.3%	19.9%	50.0%	28.9%	42.0%
Griggs	2,372	49.5%	646	27.2%	863	33.6%	20.2%	50.3%	21.6%	33.7%
Hettinger	2,515	48.3%	624	24.8%	760	21.8%	12.5%	49.6%	18.7%	4.4%
Kidder	2,414	37.8%	491	20.3%	588	19.8%	22.9%	44.5%	25.3%	43.3%
LaMoure	4,105	47.0%	1,004	24.5%	1,127	12.3%	18.1%	46.8%	19.3%	41.2%
Logan	1,985	56.4%	558	28.1%	371	-33.5%	17.7%	43.5%	27.0%	41.2%
McHenry	5,505	37.2%	1,137	20.7%	1,526	34.2%	15.6%	53.3%	24.7%	18.0%
McIntosh	2,769	73.1%	942	34.0%	916	-2.8%	20.7%	47.4%	29.8%	29.7%
McKenzie	7,019	24.9%	911	13.0%	2,177	139.0%	10.6%	45.4%	8.5%	20.8%
McLean	9,068	38.1%	1,994	22.0%	2,711	36.0%	11.9%	45.4%	18.6%	24.5%
Mercer	8,449	25.8%	1,345	15.9%	2,019	50.1%	13.2%	43.4%	21.6%	40.4%
Morton	27,734	24.6%	4,096	14.8%	5,879	43.5%	10.3%	45.6%	18.7%	40.5%
Mountrail	8,097	22.8%	1,037	12.8%	1,816	75.1%	11.7%	33.3%	23.5%	36.5%
Nelson	3,057	51.7%	826	27.0%	1,208	46.2%	13.4%	62.0%	21.3%	32.3%
Oliver	1,830	28.0%	298	16.3%	370	24.2%	20.0%	47.7%	19.6%	34.0%
Pembina	7,342	35.6%	1,473	20.1%	1,718	16.6%	11.2%	50.5%	17.6%	39.4%
Pierce	4,375	44.8%	1,013	23.2%	1,239	22.3%	17.8%	53.5%	28.1%	79.6%
Ramsey	11,452	31.8%	2,062	18.0%	2,908	41.0%	14.3%	52.7%	16.9%	39.6%
Ransom	5,403	36.2%	1,074	19.9%	1,347	25.4%	12.2%	47.3%	27.9%	43.5%
Renville	2,490	36.0%	488	19.6%	644	32.0%	5.8%	40.0%	11.9%	0.0%
Richland	16,245	25.6%	2,403	14.8%	2,889	20.2%	9.7%	50.6%	23.5%	44.2%
Rolette	14,206	18.8%	1,445	10.2%	2,480	71.6%	28.6%	40.0%	23.2%	30.6%
Sargent	3,798	33.7%	731	19.2%	1,068	46.1%	7.5%	45.8%	15.5%	39.1%
Sheridan	1,309	57.1%	400	30.6%	365	-8.8%	18.4%	38.2%	15.8%	50.0%
Sioux	4,280	13.5%	315	7.4%	388	23.2%	37.2%	45.0%	28.6%	7.4%
Slope	718	31.5%	136	18.9%	241	77.2%	15.6%	30.0%	11.3%	44.4%
Stark	25,177	27.0%	3,927	15.6%	6,105	55.5%	13.5%	49.3%	22.0%	49.9%
Steele	1,950	40.7%	427	21.9%	372	-12.9%	7.5%	42.0%	12.4%	31.3%
Stutsman	21,062	28.8%	3,630	17.2%	4,622	27.3%	12.4%	52.6%	25.0%	38.0%
Towner	2,264	45.1%	543	24.0%	552	1.7%	8.3%	58.5%	15.8%	47.1%
Traill	8,147	33.7%	1,545	19.0%	2,122	37.3%	12.1%	56.1%	20.8%	43.0%
Walsh	11,032	36.2%	2,247	20.4%	2,949	31.2%	12.2%	54.7%	17.2%	32.9%
Ward	64,072	21.6%	8,056	12.6%	10,661	32.3%	10.9%	45.2%	22.6%	59.3%
Wells	4,237	56.4%	1,179	27.8%	1,175	-0.3%	19.5%	52.2%	17.4%	35.6%
Williams	24,374	24.9%	3,339	13.7%	7,333	119.6%	9.8%	44.7%	14.4%	58.0%

TABLE 1. CHARACTERISTICS OF NORTH DAKOTA RESIDENTS AGES 65 AND OLDER BY COUNTY

\* Retirement ratio = number of people ages 65 and older as a proportion of persons ages 20 to 64

# Among persons for whom poverty has been determined (for example, persons living in group quarters are excluded); living in poverty = incomes below 100 percent of the federal poverty level, see http://aspe.hhs.gov/poverty/13poverty.cfm for income limits

^ Cost-burdened = households with monthly housing costs that are at least 30 percent of the household's income