

# Demographic and Health Trends Impacting North Dakota



Healthy North Dakota Coordinating Committee Meeting  
August 26<sup>th</sup>, 2013

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... Measuring progress. Inspiring action.



## ND Compass is a project of the Center for Social Research (CSR) at NDSU

- ▶ A one-stop social indicators website in North Dakota with tools to help access and interpret data.

... Measuring progress. Inspiring action.

# Presentation Objectives:

1. To present an overview of historical shifts and trends in the demographics and health of ND.
2. To introduce the social indicators website ND Compass and its resources.

# Contextual Indicators

- ▶ Social determinants of health
  - Key measure breakdowns – geography, income, education, race, gender
  - Poverty (Economy), Educational attainment (Workforce)
- ▶ Context
  - Demographics
    - Population trends
    - Disability prevalence
  - Early Childhood
    - Total Births (from Low Birth Weight → Data & Notes)

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# Health-Related Indicators

- ▶ Health Topic area
  - 4 key measures = diabetes, obesity, health care coverage, mental health
- ▶ Other topics
  - Low birth weight (Early Childhood)
  - Youth use of alcohol and youth sexual activity (Children & Youth)
  - Air quality (Environment)

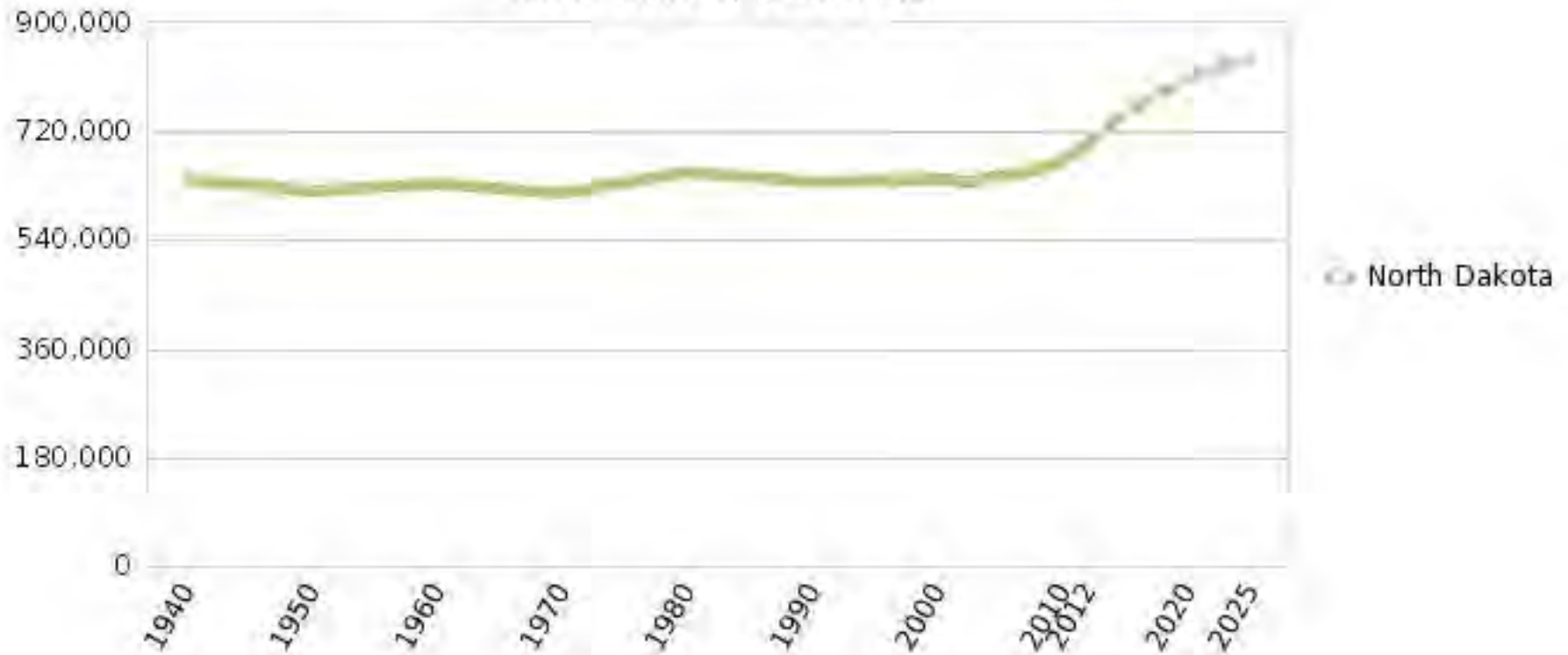


NORTH DAKOTA  
**COMPASS**

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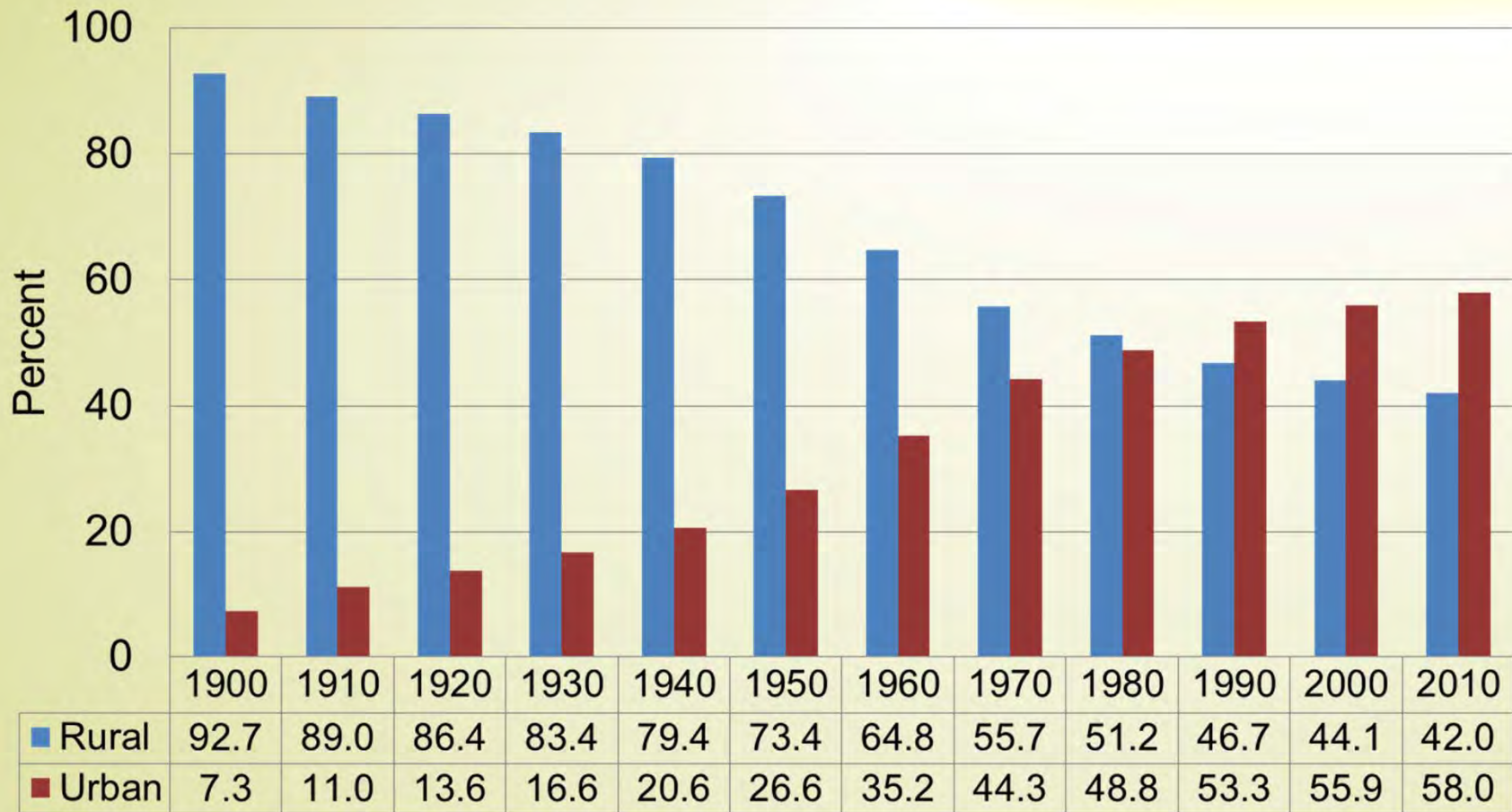
## Total population, trend and forecast

North Dakota, 1940-2025



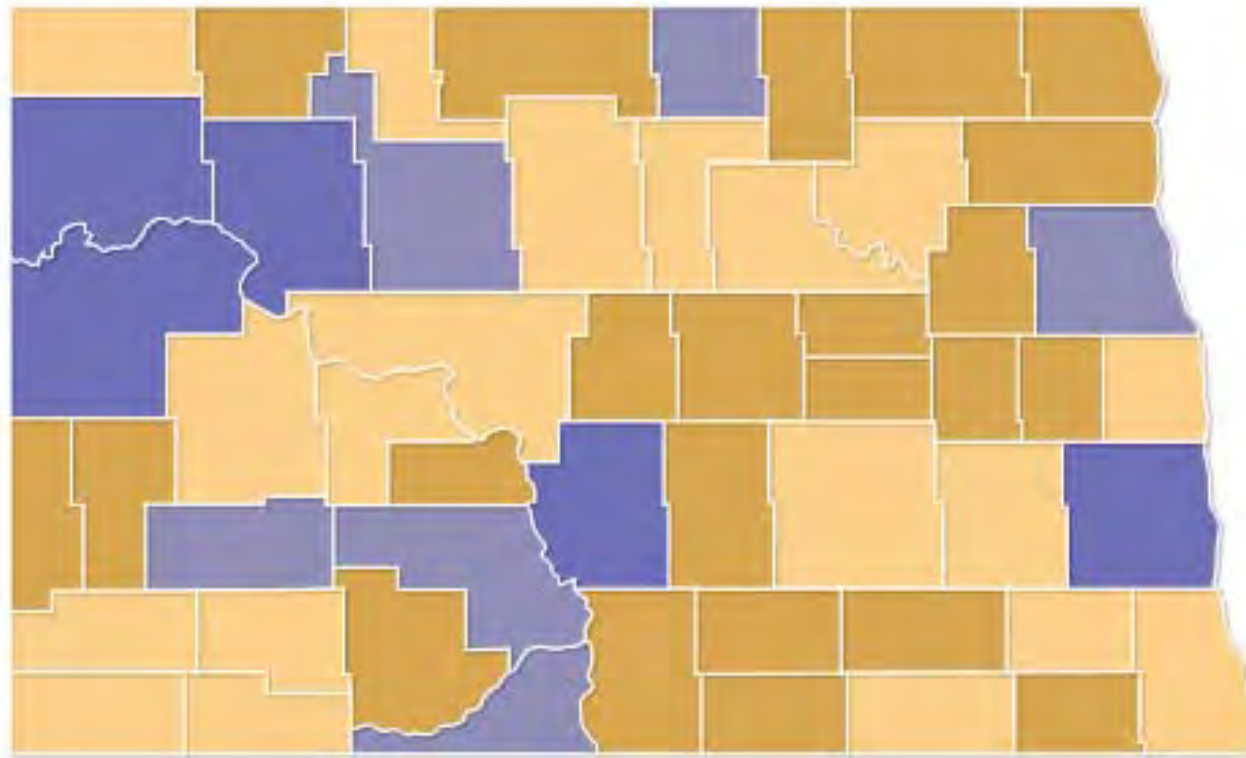
## North Dakota Population >>

North Dakota's 2012 population reached a historic high – 699,628. The previous peak was in 1930 at 680,845.



## ND Rural-Urban Population Distribution >>

More North Dakotans live in urban areas (2,500+) by 1990.  
 223 (62%) of ND's 357 incorporated places are smaller than 250 people.



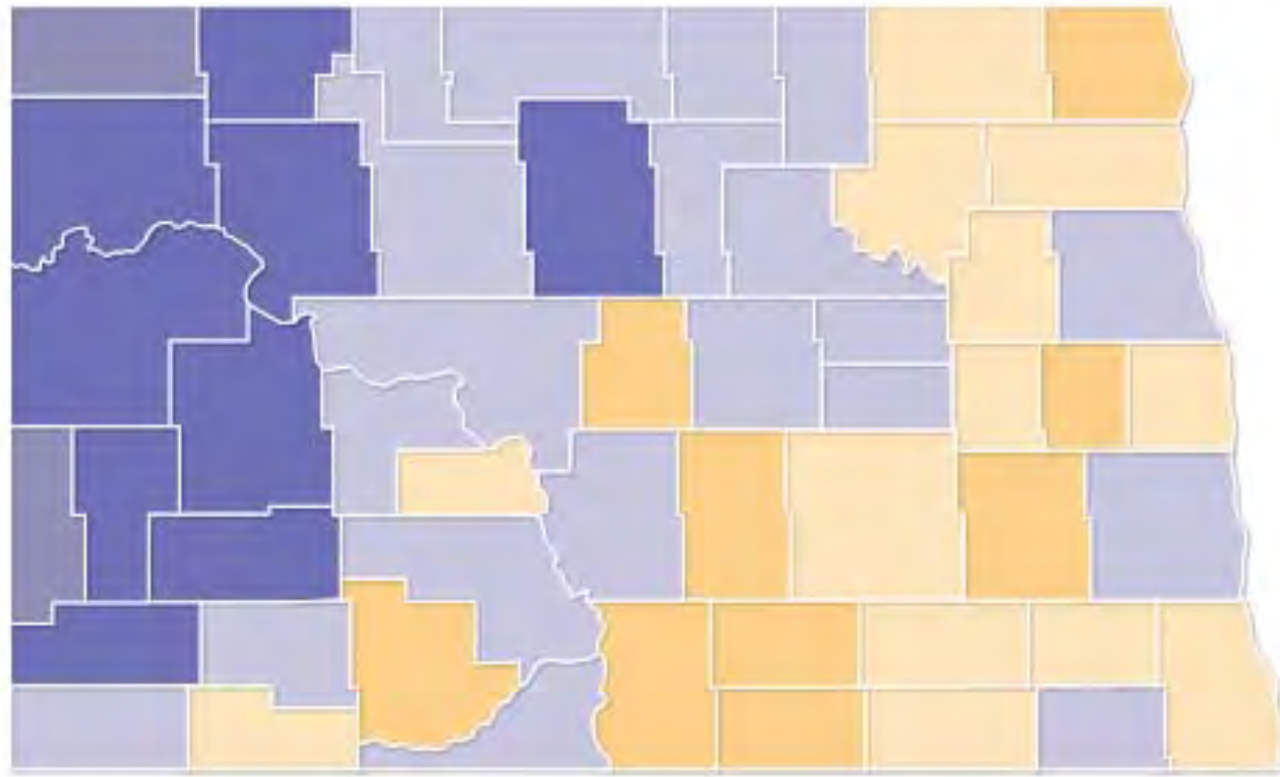
- Growth of 10% or more
- Growth of less than 10%
- Decline of less than 10%
- Decline of 10% or more


 Compiled by  
 Compass

## % Change in Population: 2000–2010 >>

11 of 53 counties gained population from 2000 to 2010.





- Growth of 5% or more
- Growth of 3% to 4%
- Growth of less than 3%
- Neither growth nor decline
- Decline


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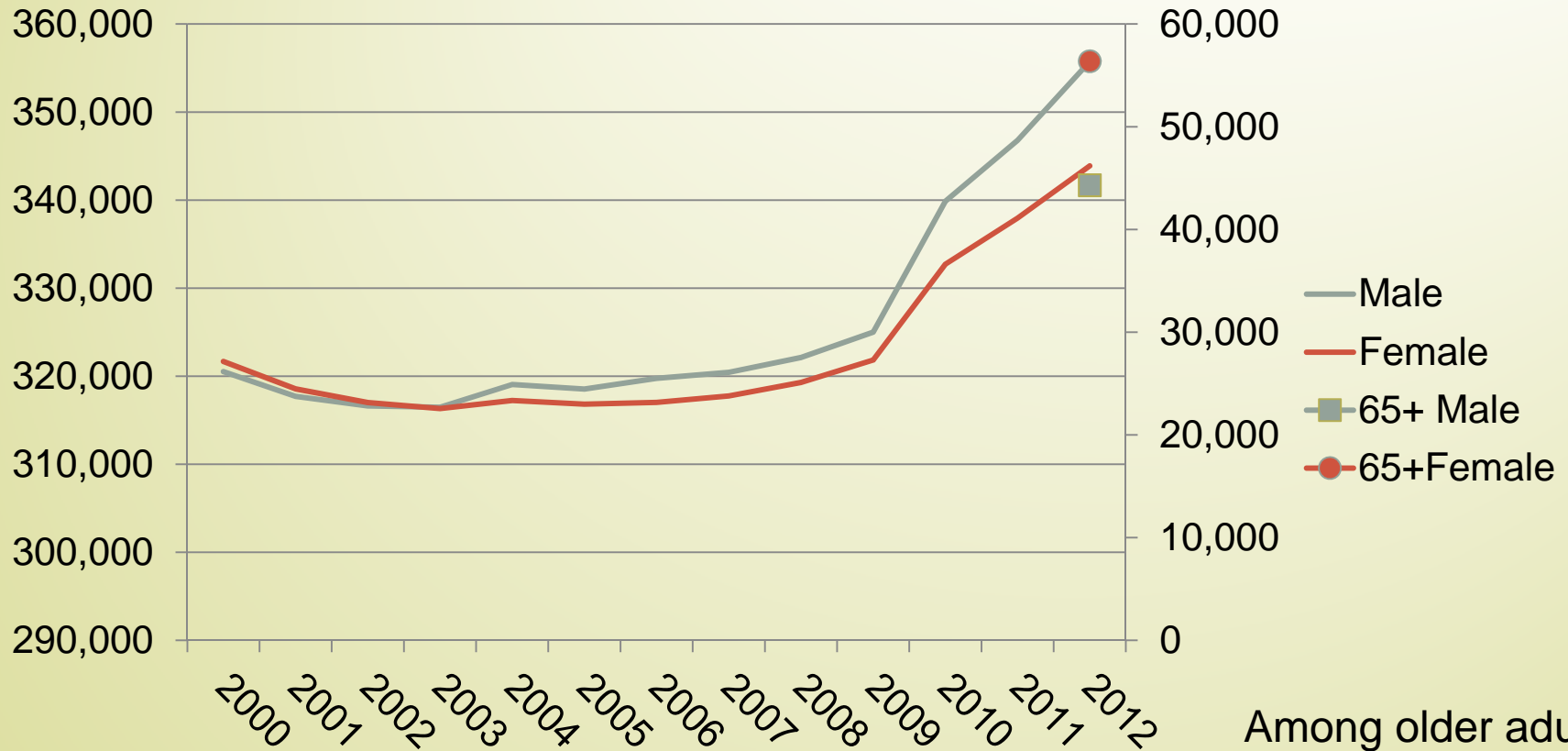
## % Change in Population: 2011–2012 »»

ND's population grew 2.2% from 2011 to 2012, the fastest growth among all states.

38 of 53 counties gained population from 2011 to 2012.

Population loss is still a reality for many counties.

# Gender Distribution



Source: U.S. Census Bureau, Population Division

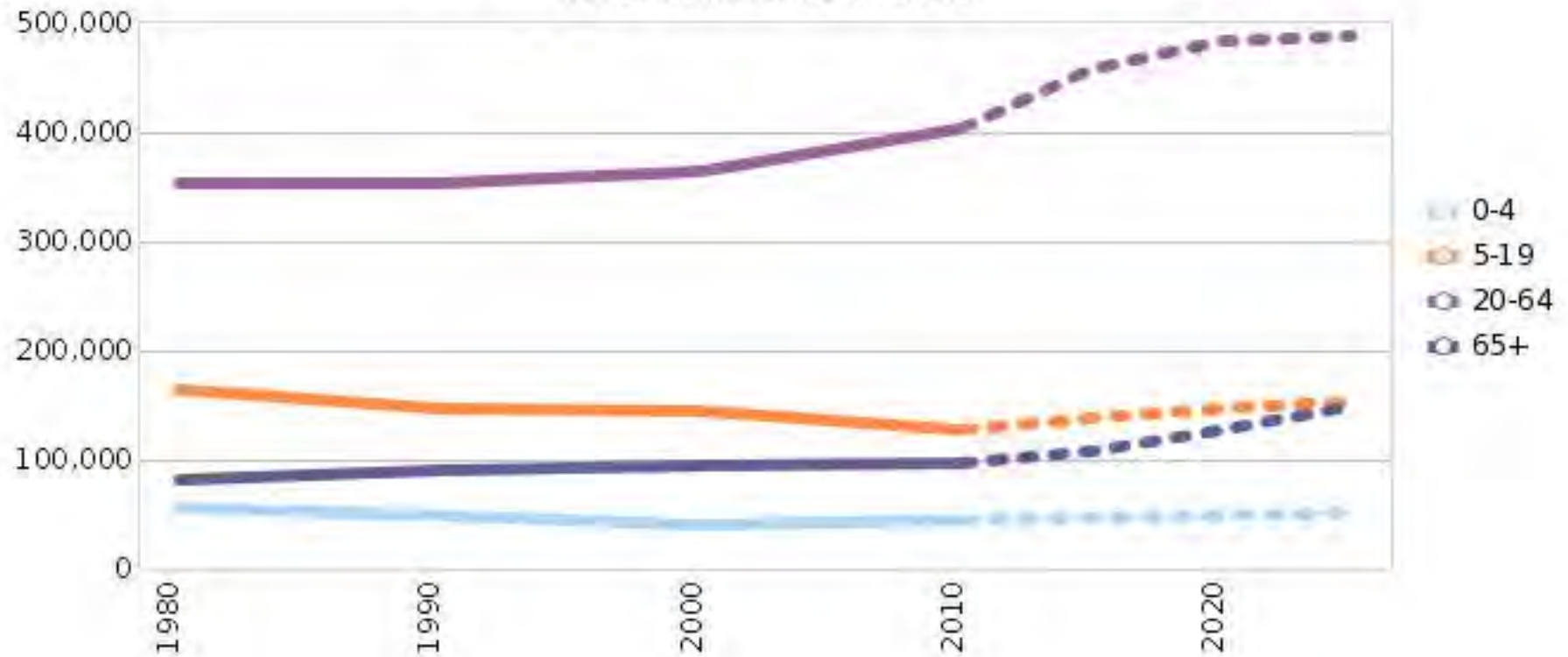
Among older adults, ND had 77 men for every 100 women.\*

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 \*North Dakota's Aging Population

<http://www.ndcompass.org/aging/library.php?libItemID=1163#.UhoYfD9KbK4>

## Population by select age groups, trend and forecast

North Dakota, 1980-2025

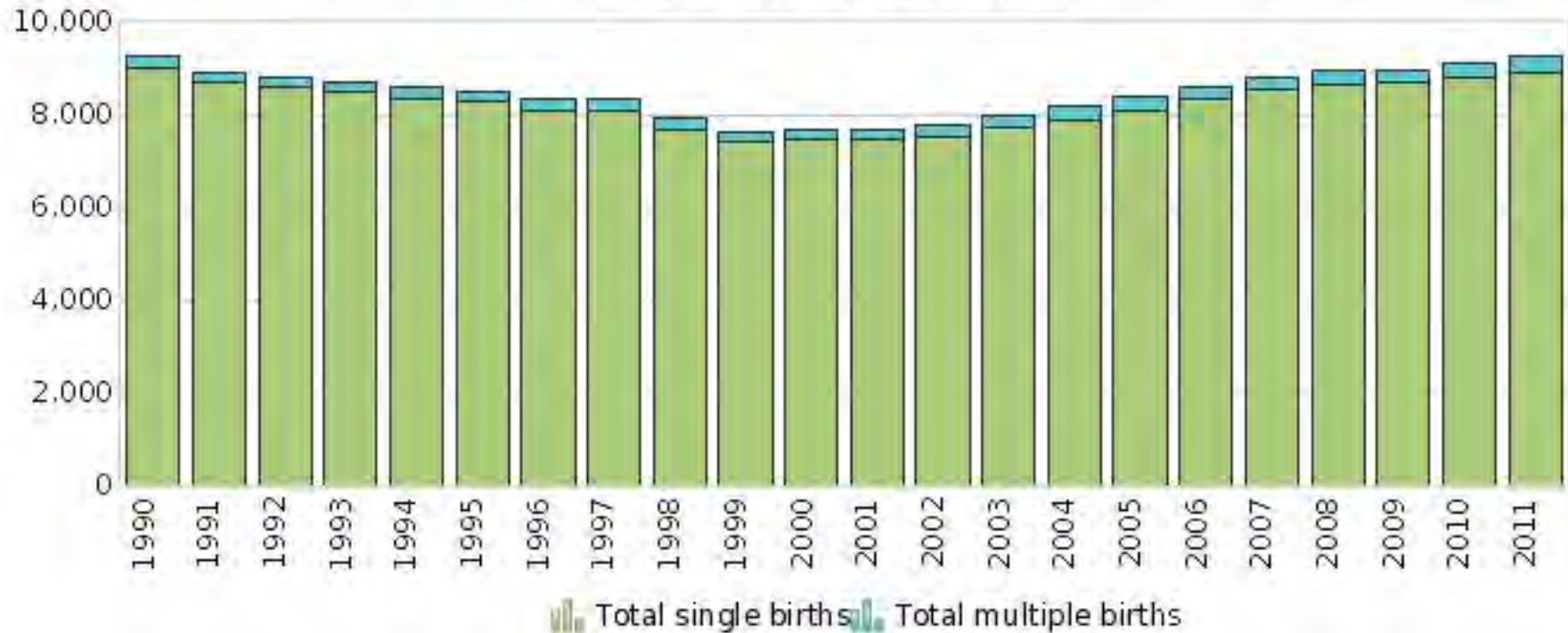


## Population by Age »»

Growth in working age pop corresponds to small growth in # of children.  
Growing #, % of elderly: 12% in 1980, projected to reach 18% by 2025.

## Total babies born by single and multiple births

North Dakota, 1990-2011



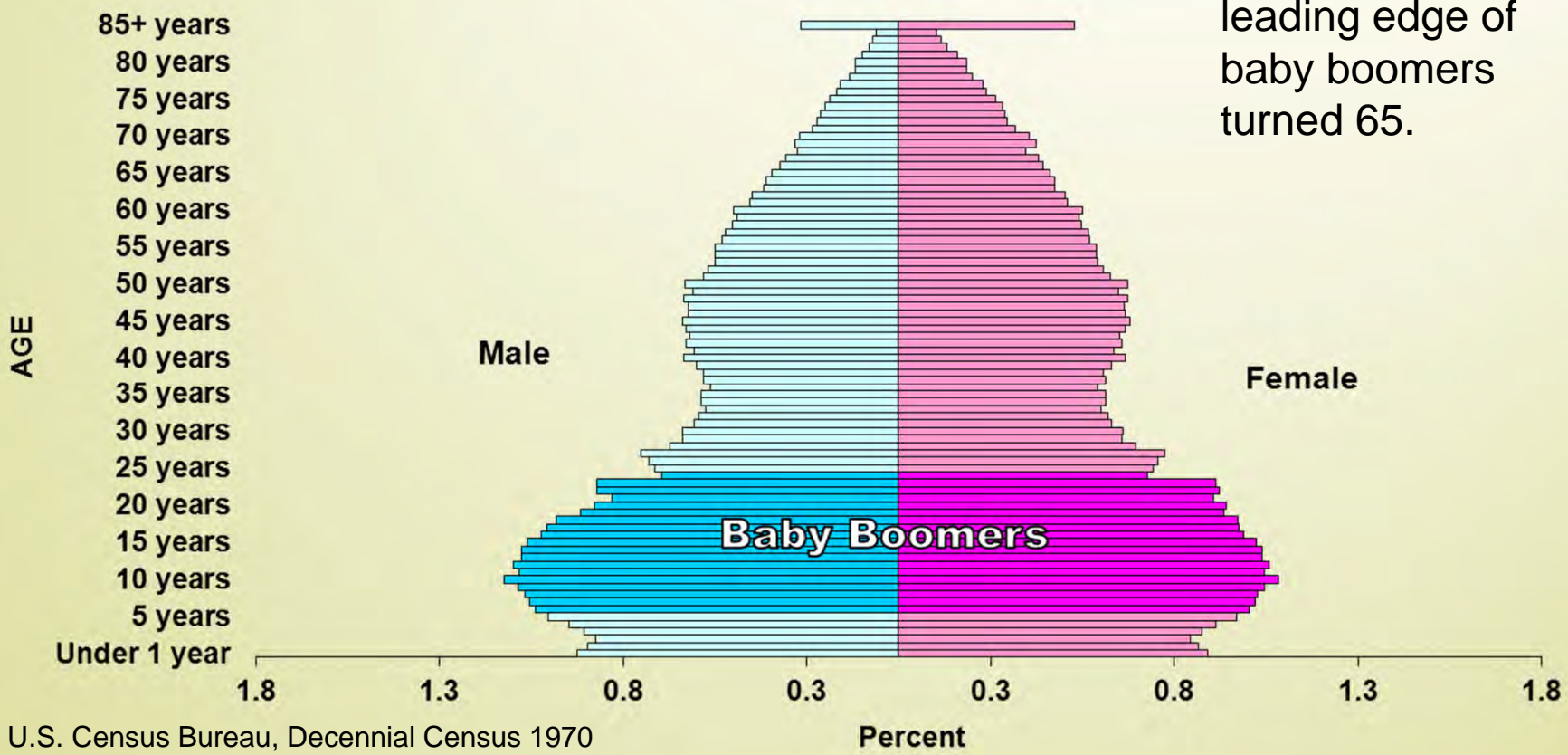
Births >>

# of births reached 9,234 in 2011, up from low of 7,635 in 1999.

# Continued Population Increase Projected

- ▶ Increases in age groups (largely due to oil boom) lessening the “graying of ND”
- ▶ # of older adults in ND is expected to increase 50%.\*
  - From 98,595 in 2011 to 148,060 in 2025.
  - McKenzie, Williams, Divide counties more than double # of seniors
  - Overall state proportion rise to 18% (from 14% now)
- ▶ In 2012, ND had the 2<sup>nd</sup> highest proportion of older adults ages 85+ in the nation at 2.5%.\*
  - # more than doubled from 1980 to 2012
  - Expected to stay fairly stable during next 14 years (grow again when baby boomers reach this age bracket)

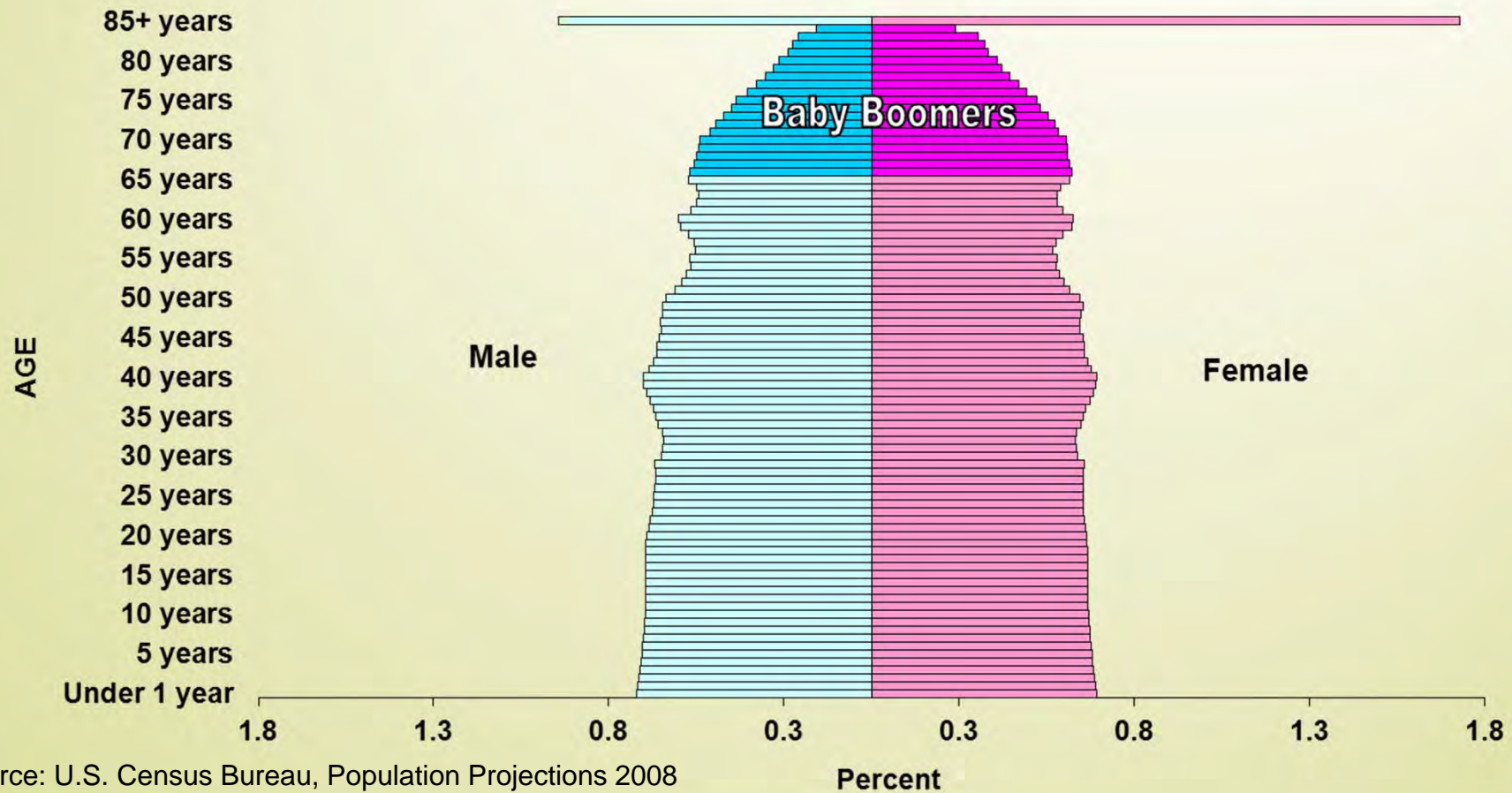
# Population by Single Year of Age and Sex in the U.S. : 1970



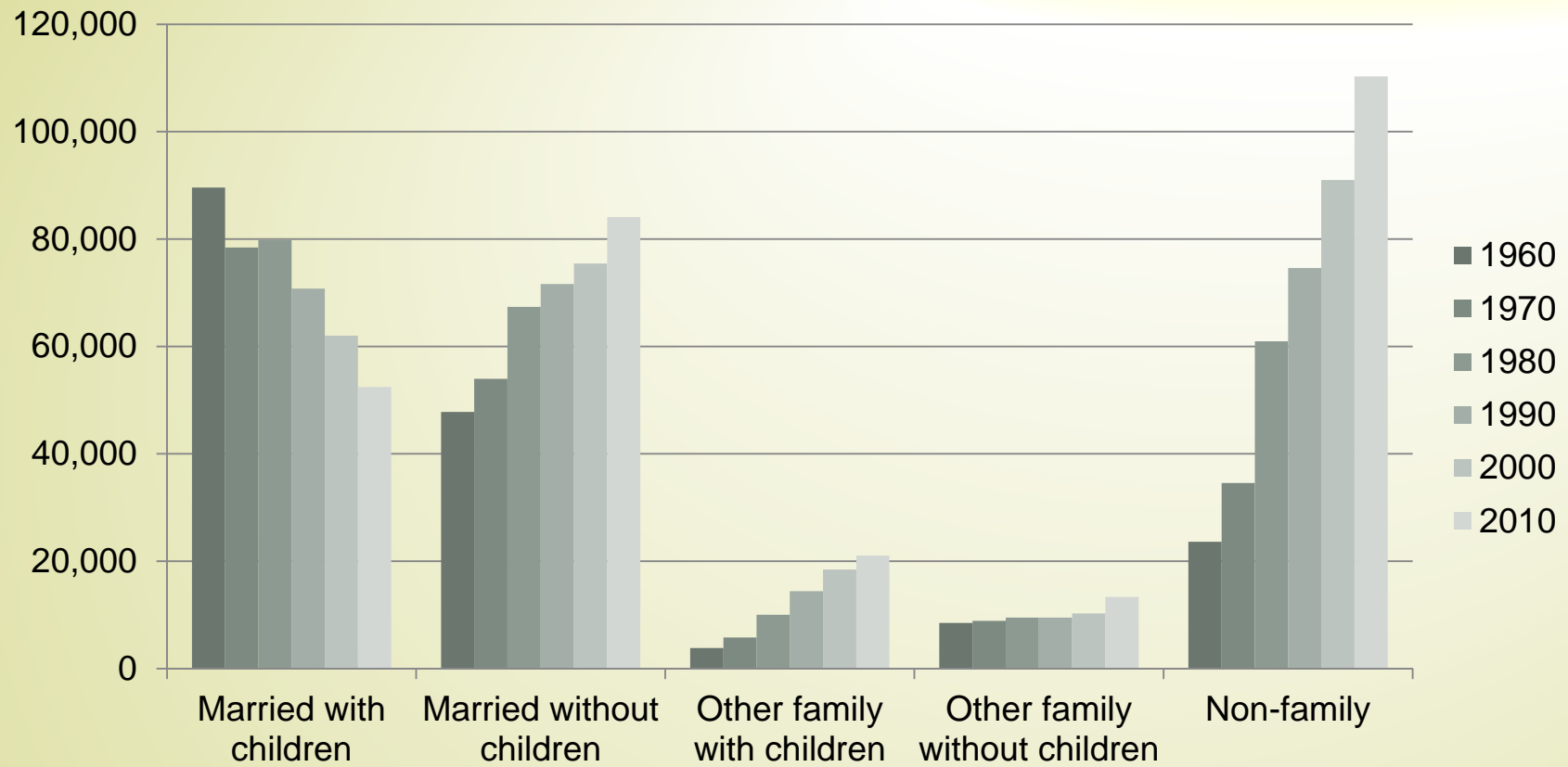
In 2011, the leading edge of baby boomers turned 65.

Source: U.S. Census Bureau, Decennial Census 1970

# Population by Single Year of Age and Sex in the U.S. : 2030



Source: U.S. Census Bureau, Population Projections 2008

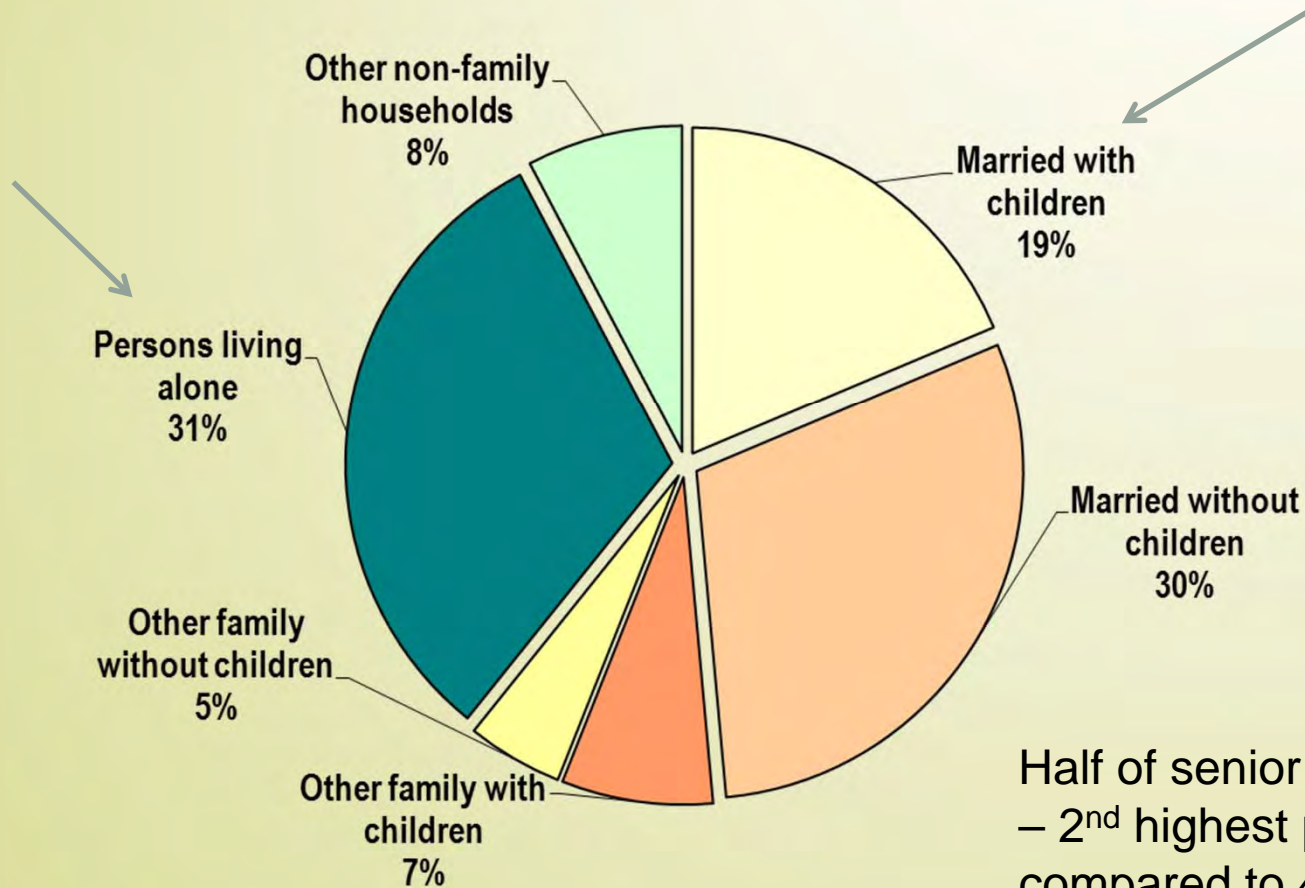


## ND Households by Type >>

Dramatic shifts over the past several decades. Decrease in # and proportion that are married with children while other types have growth. Non-family households have seen greatest increases (people living alone).



# Household Types in ND: 2010



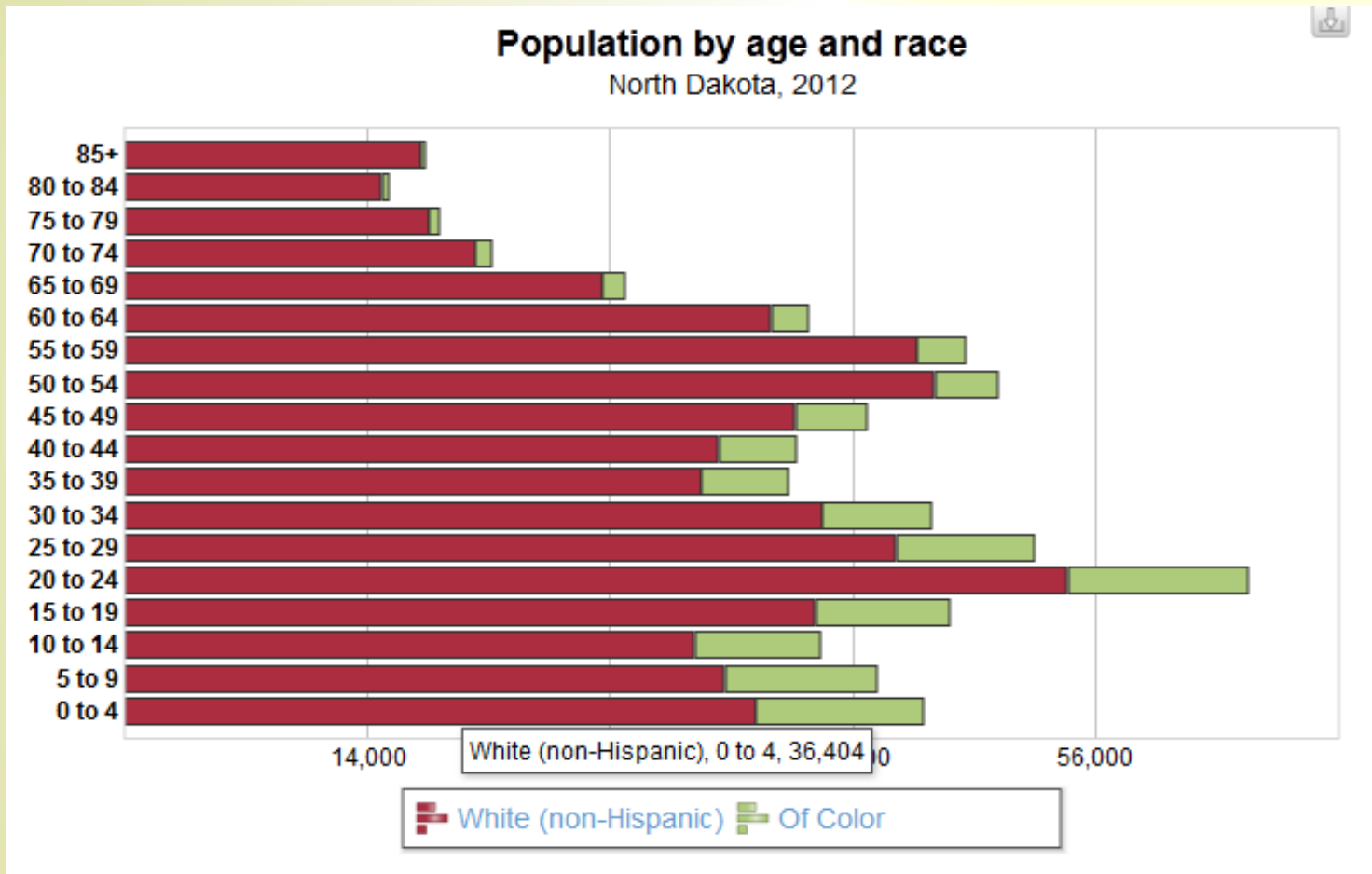
Source: U.S. Census Bureau

Half of senior householders live alone – 2<sup>nd</sup> highest proportion in the nation – compared to 44% nationally. 72% of senior householders living alone are female.\*

Center for Social Research at NDSU

\*North Dakota's Aging Population

<http://www.ndcompass.org/aging/library.php?libItemID=1163#.UhoYfD9KbK4>

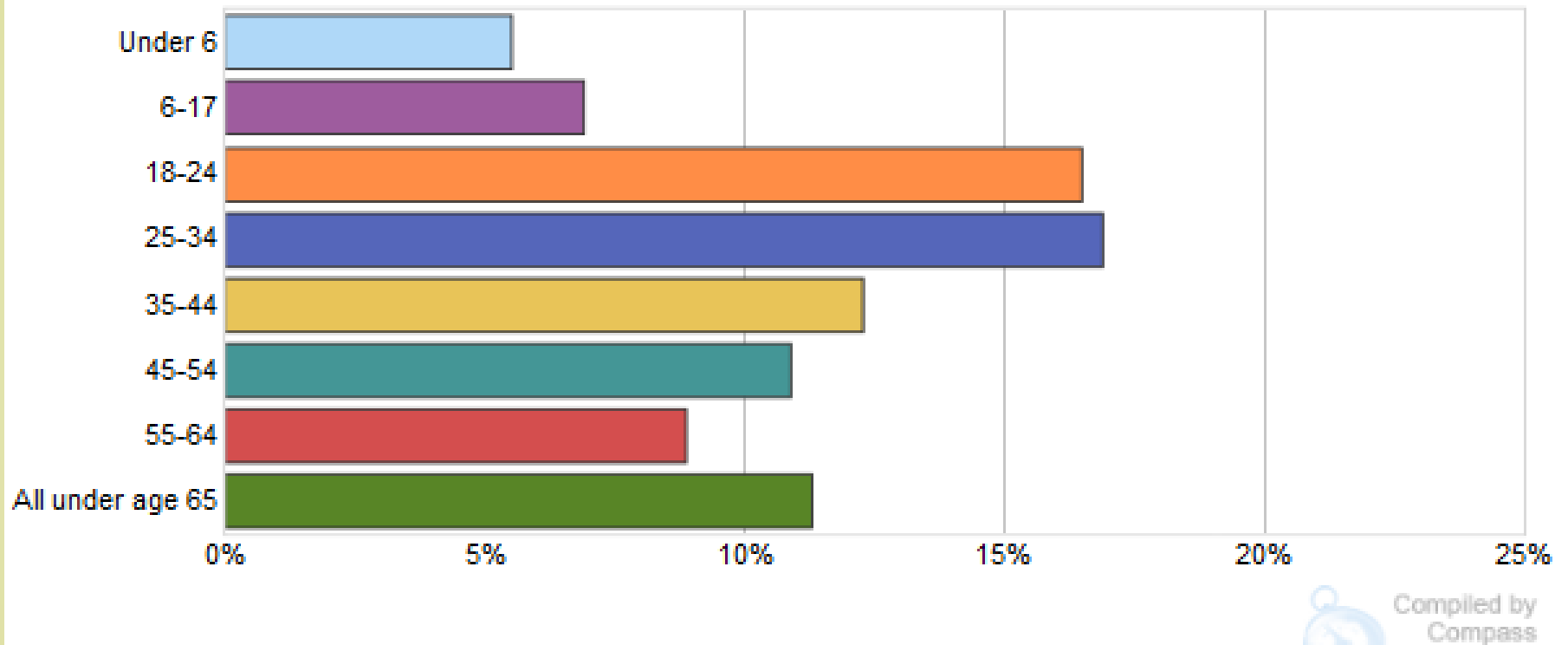


## Population Diversity >>

Diversity is increasing, with much larger numbers/proportions of Of Color residents in the younger age groups.

## Residents under 65 without health insurance by detailed age group

North Dakota, 2011



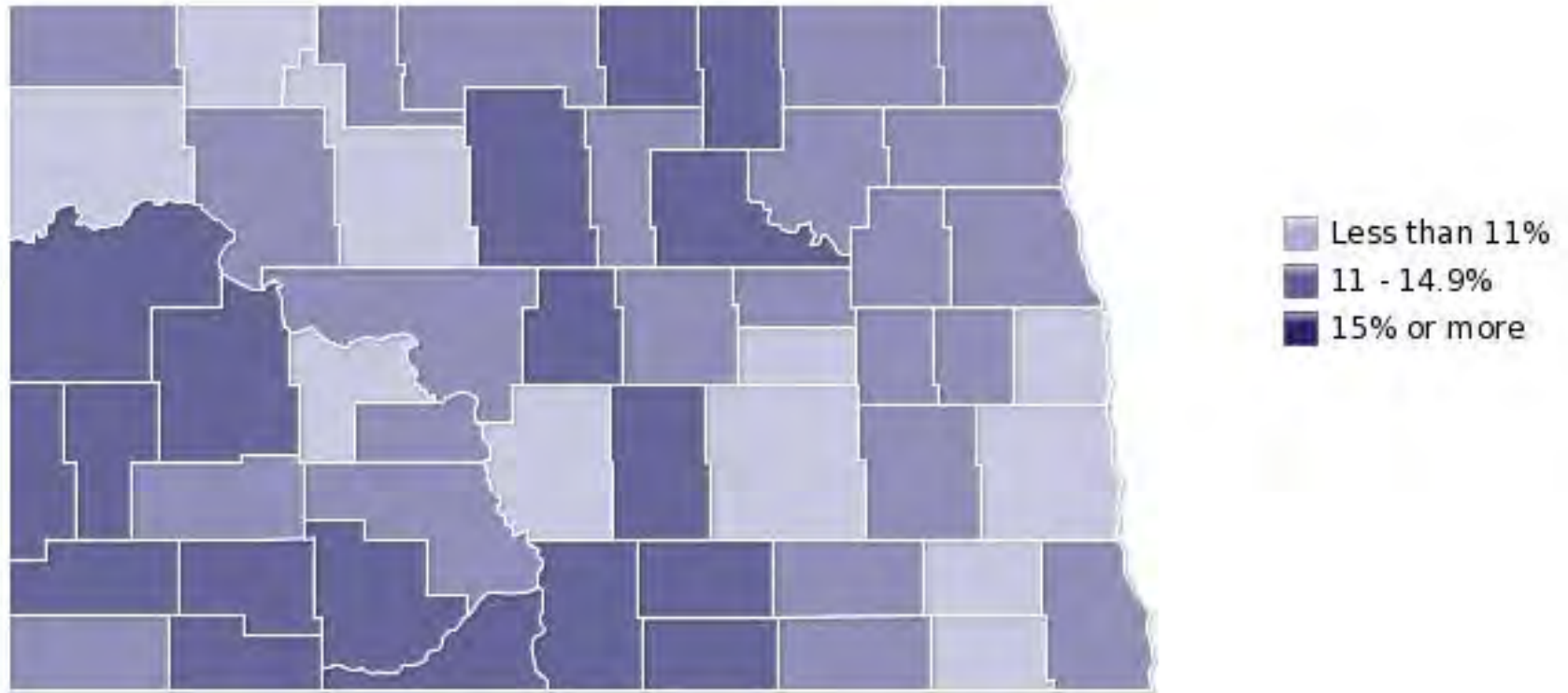
## Uninsured by Age (Under 65) >>

Greatest rates of uninsured: 18-34 (approx. 17% compared to 11% for all under 65).

97% of ND seniors have health-care coverage (most are eligible for Medicare).\*

## Residents under age 65 without health insurance

By county, North Dakota, 2010

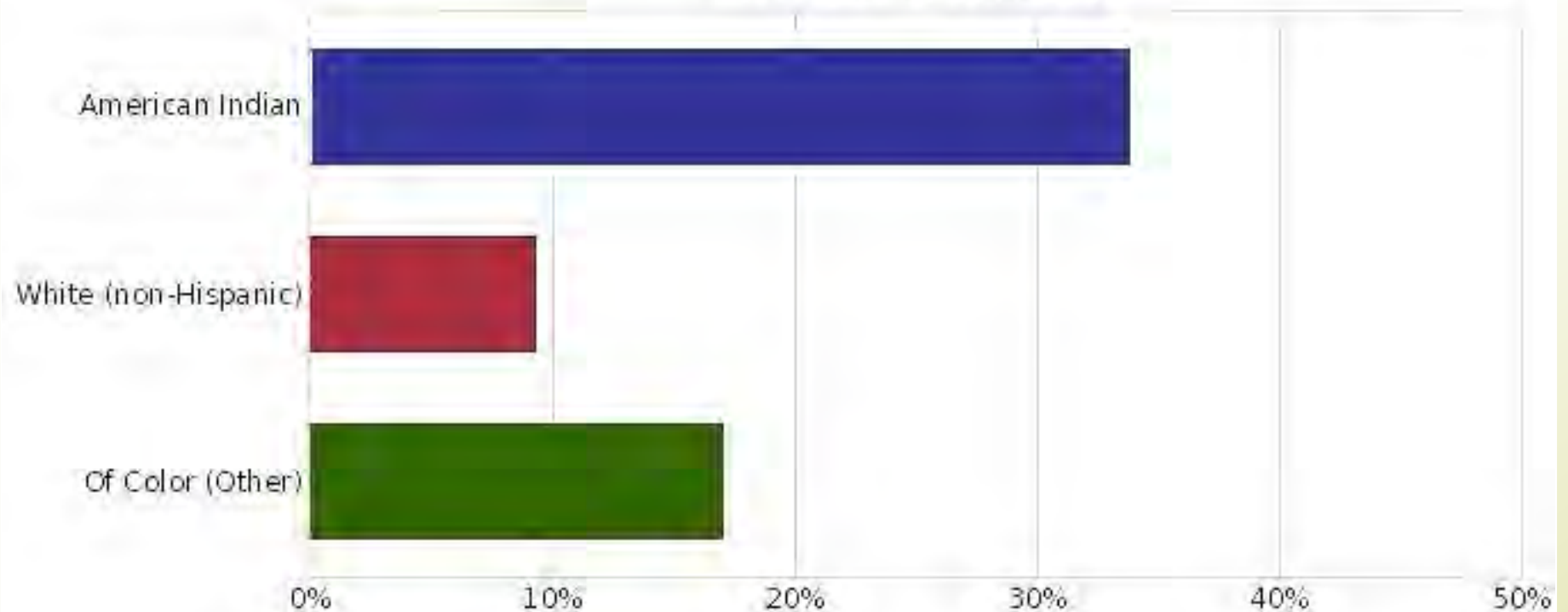


## Uninsured by County (Under 65) >>>

At least 1 in 5: Grant (26%), Logan, Sheridan, Slope  
Access is an issue: 35% of all North Dakotans live in a primary health-care professional shortage area.\*

## Residents under 65 without health insurance by race

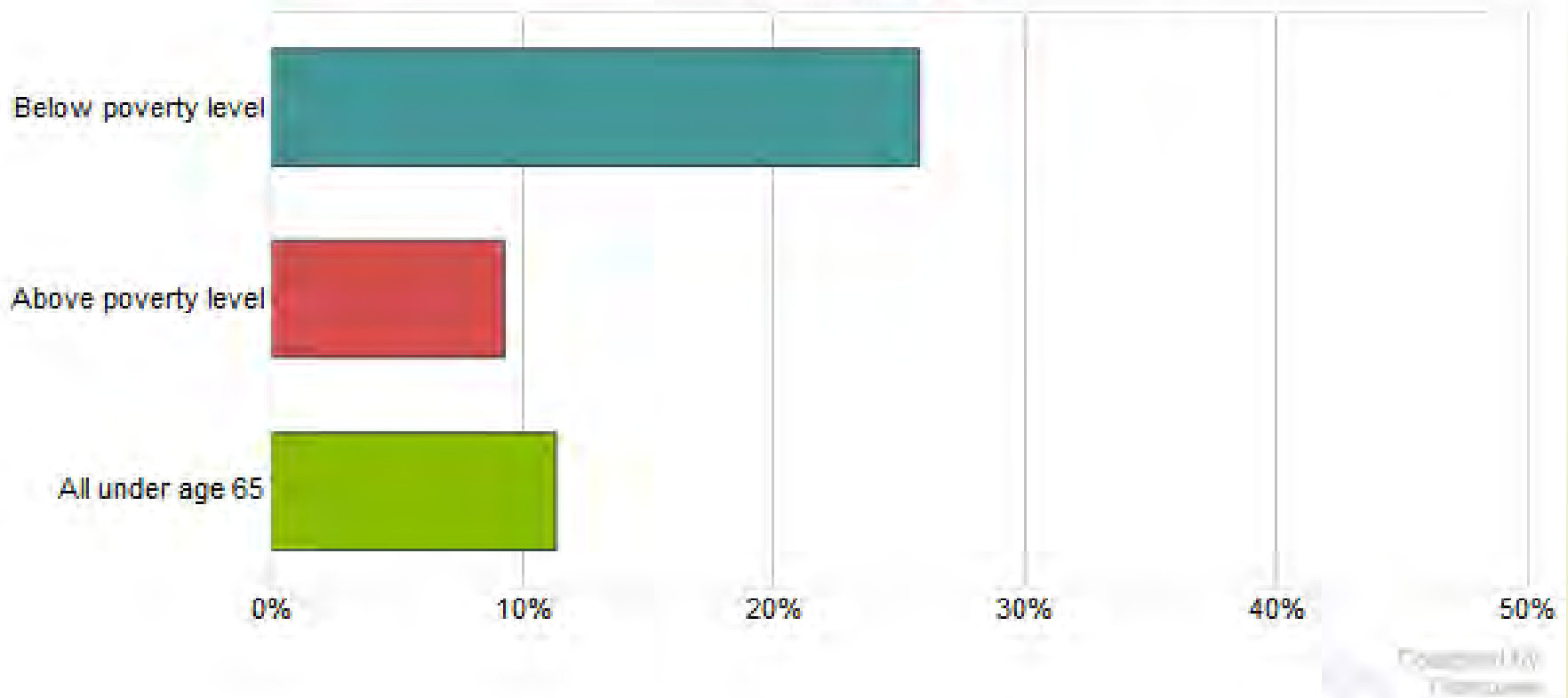
North Dakota, 2009-2011



## Uninsured by Race (Under 65) >>>

Rate more than 3x higher for American Indians than whites (34% vs. 9%)  
*Indian Health Service - considered a health provider not a health insurer.*  
*Exemption from ACA for enrolled tribal members (?).*

## Residents under 65 without health insurance by poverty status North Dakota, 2011

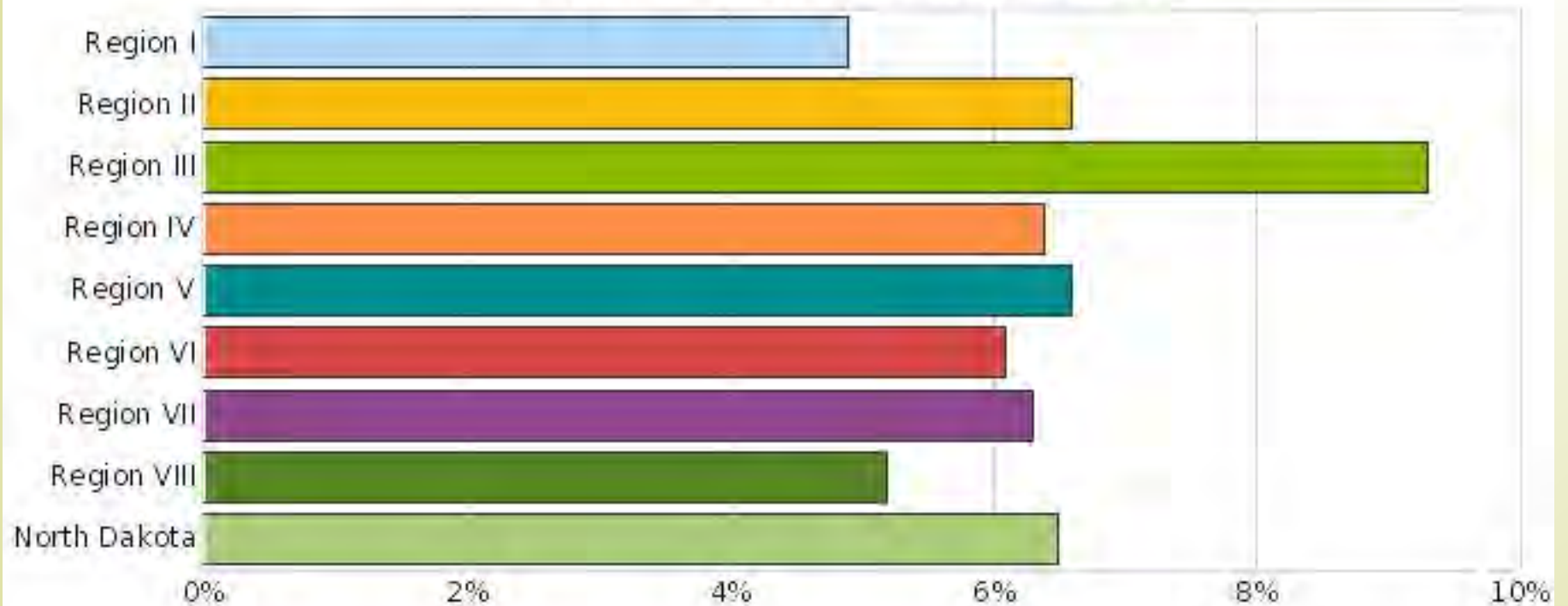


## Uninsured by Poverty Status (Under 65) >>>

Rate ~3x higher for those below poverty level than those above it (26% vs. 9%)

## Babies born at low birth weight (all births)

By planning region, North Dakota, 2011

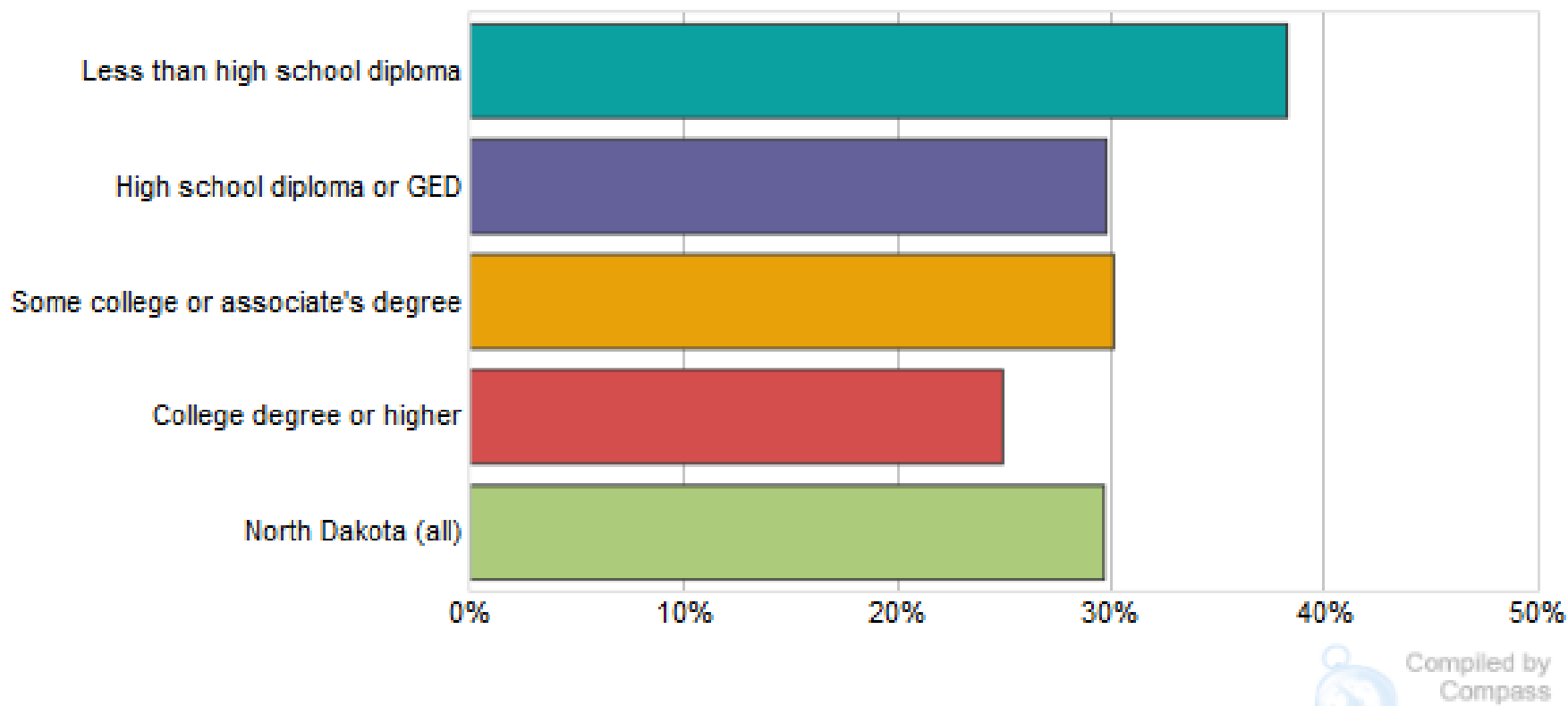


## Low Birth Weight by Planning Region >>

6.5% of all births statewide; 9.3% in Region 3, 4.9% in Region 1

## Adults who are obese by educational attainment

North Dakota, 2012



## Obesity by Educational Attainment >>

*(Note, on website, graphs are dynamic and MOEs are provided where available.)*

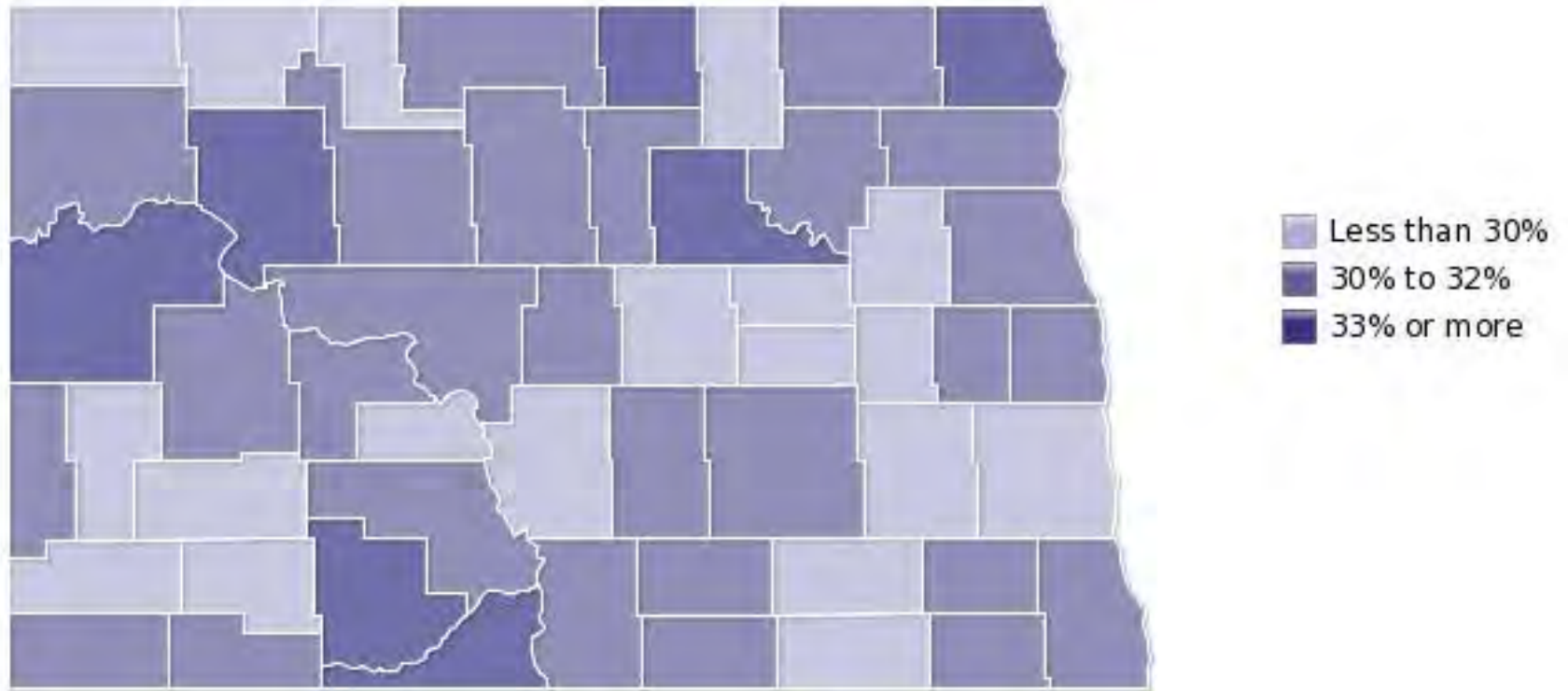
30% of North Dakotans are considered OBESE.

Rates higher with lower education levels.



## Percentage of adults (20+) who are obese

North Dakota counties, 2009



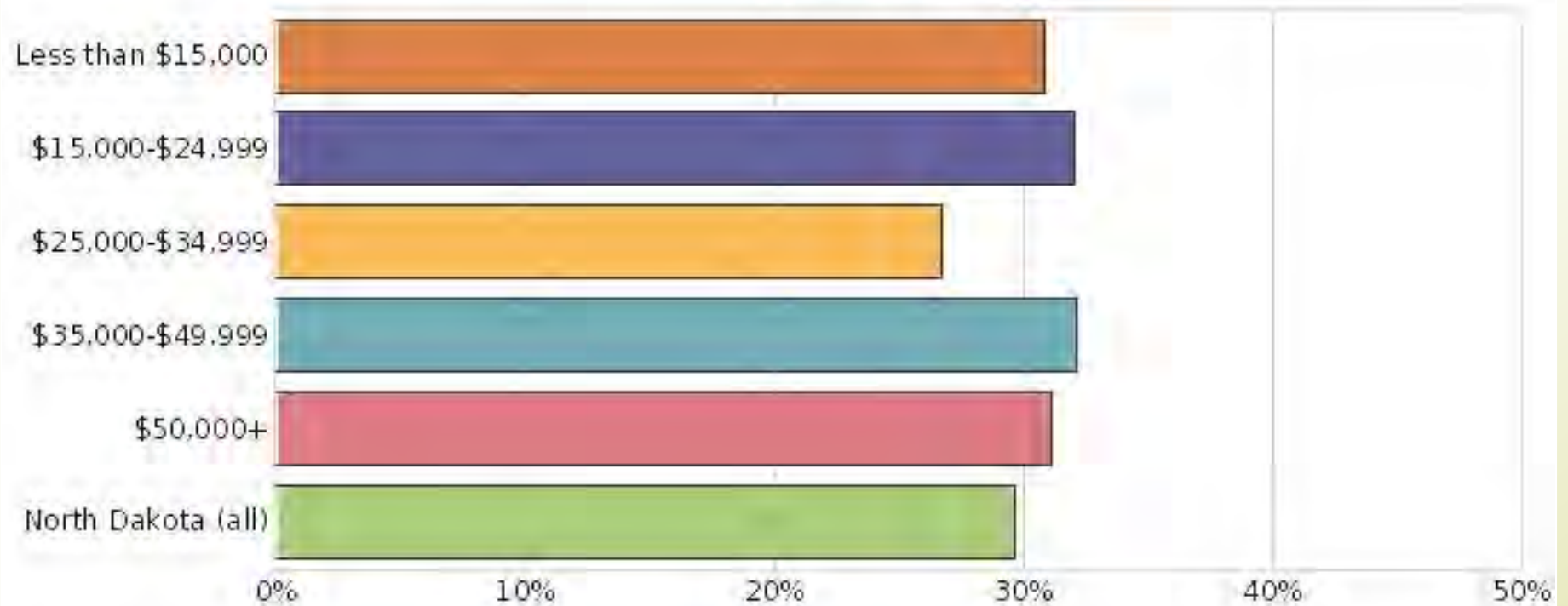
## Obesity by County »»

Darkest purple = counties in which 1 in 3 adults is OBESE.

Can see some geographic patterns in areas with Native American Reservations.

## Adults who are obese by annual household income

North Dakota, 2012



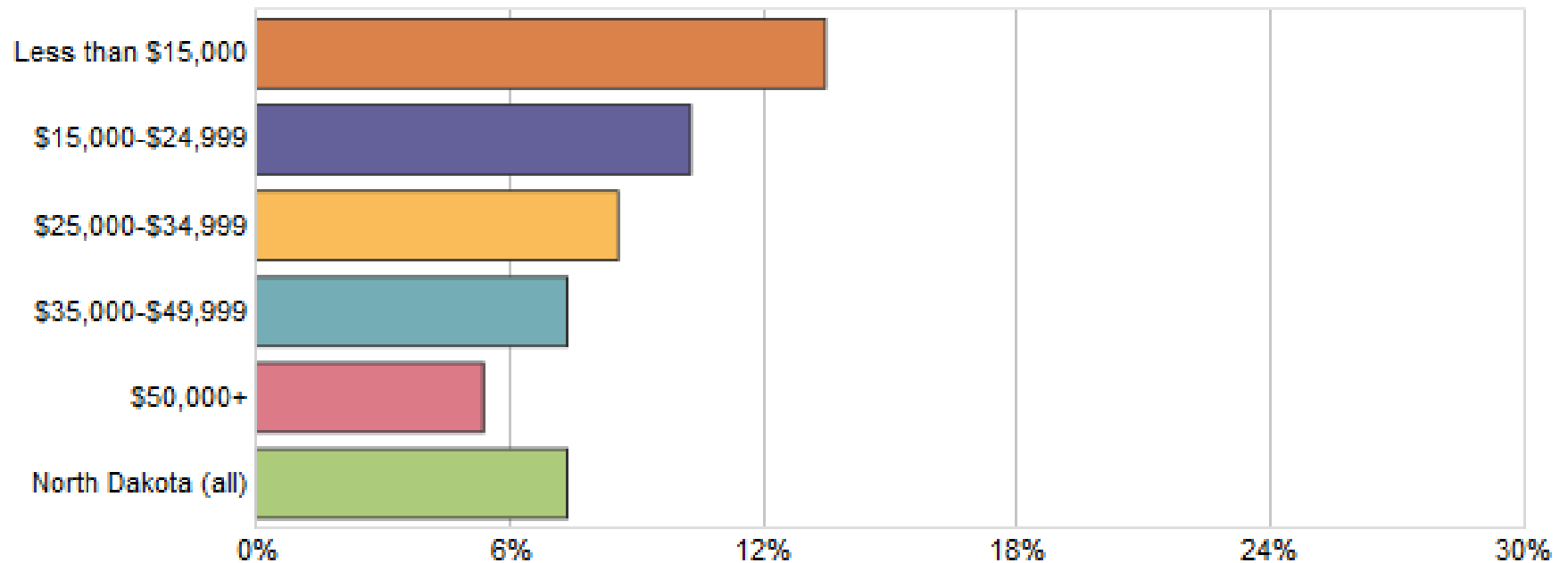
## Obesity by Income >>

Obesity rates are high across all income groups.

## Adults (18+) diagnosed with diabetes by annual household income



North Dakota, 2010



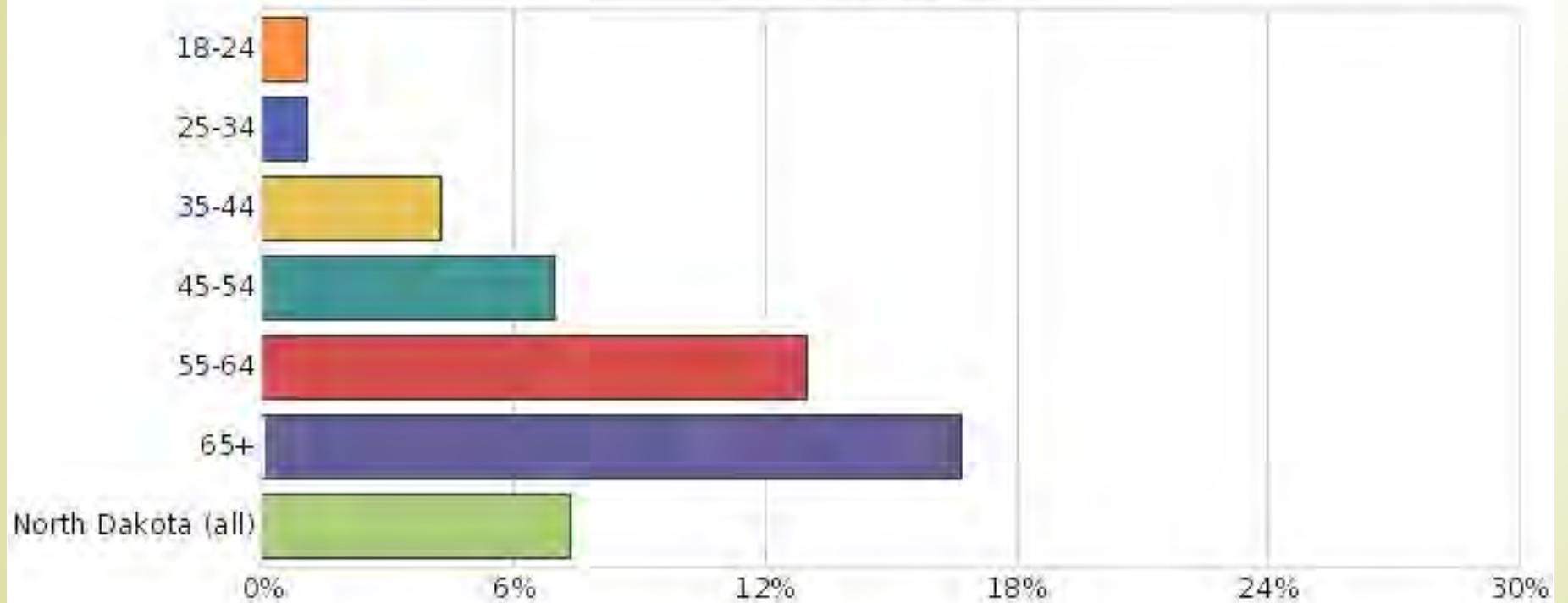
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## Diabetes by Income >>

Much higher prevalence among lower income groups.

## Adults (18+) diagnosed with diabetes by detailed age

North Dakota, 2010

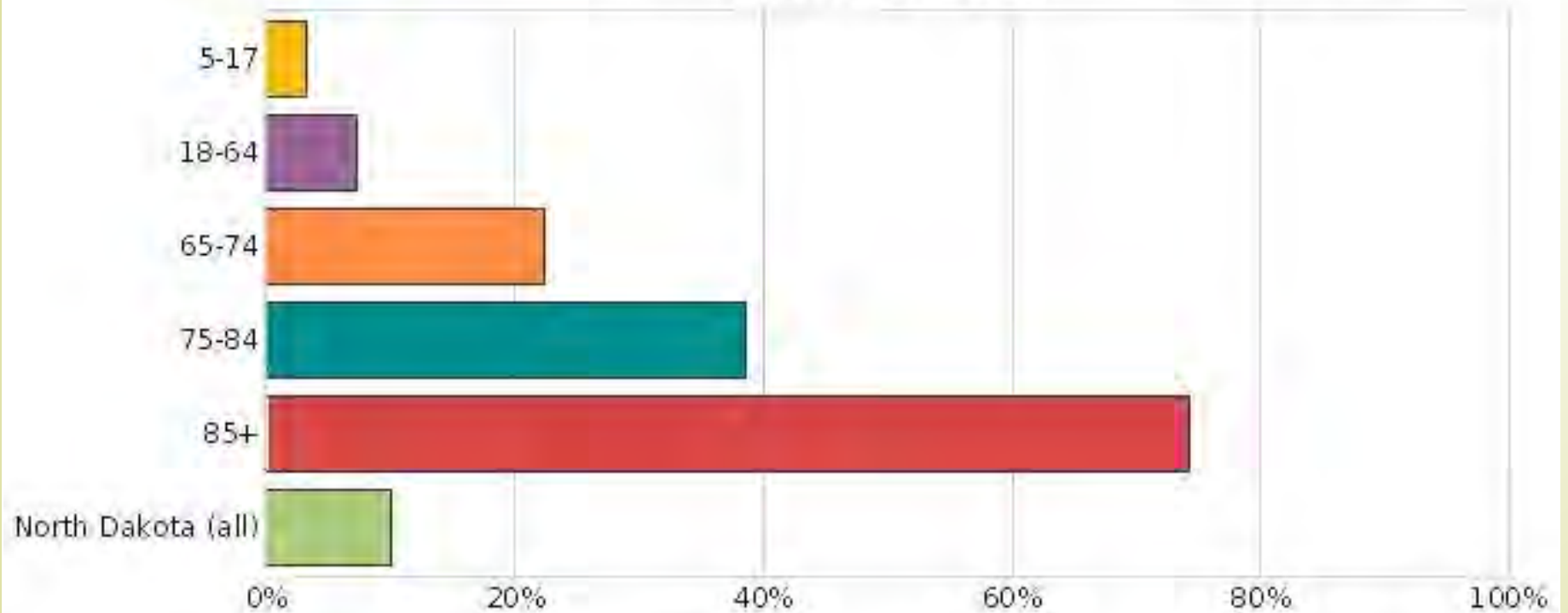


## Diabetes by Age (18+) >>>

7.4% of North Dakotans have diabetes; 17% (nearly 1 in 6) of seniors 65+.

## Percent of residents with a disability by age

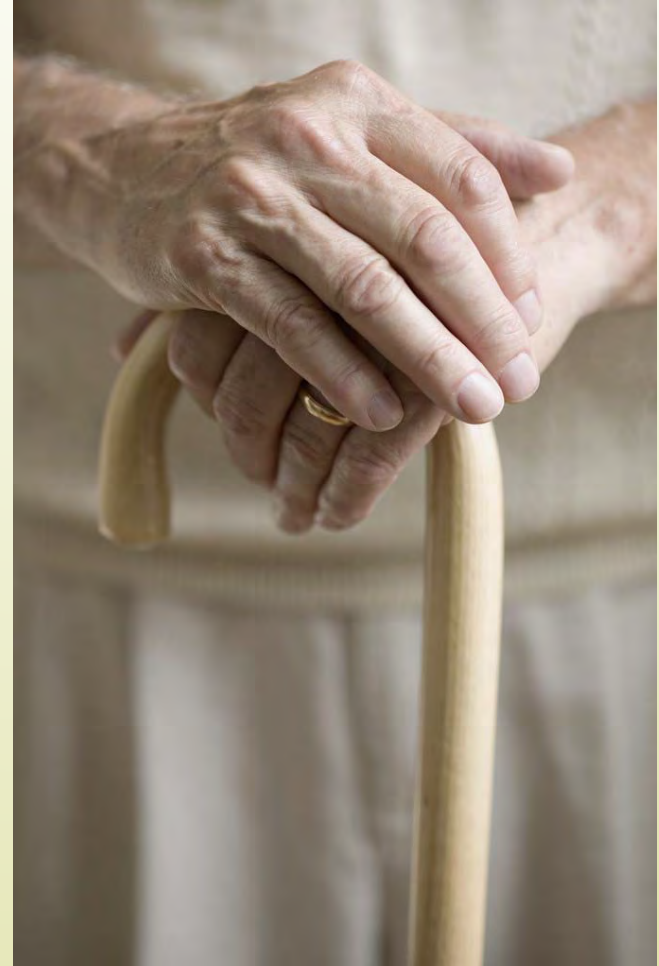
North Dakota, 2011



Disability by Age >>

# Difficulties and Disabilities

- ▶ More than 1 / 3 of (noninstitutionalized) older adults report having a disability (35%).
- ▶ Difficulties include:
  - Ambulatory (20%)
  - Hearing (16%)
  - Independent living (13%)
  - Vision (7%)
  - Cognitive (6%)
  - Self-care (5%)



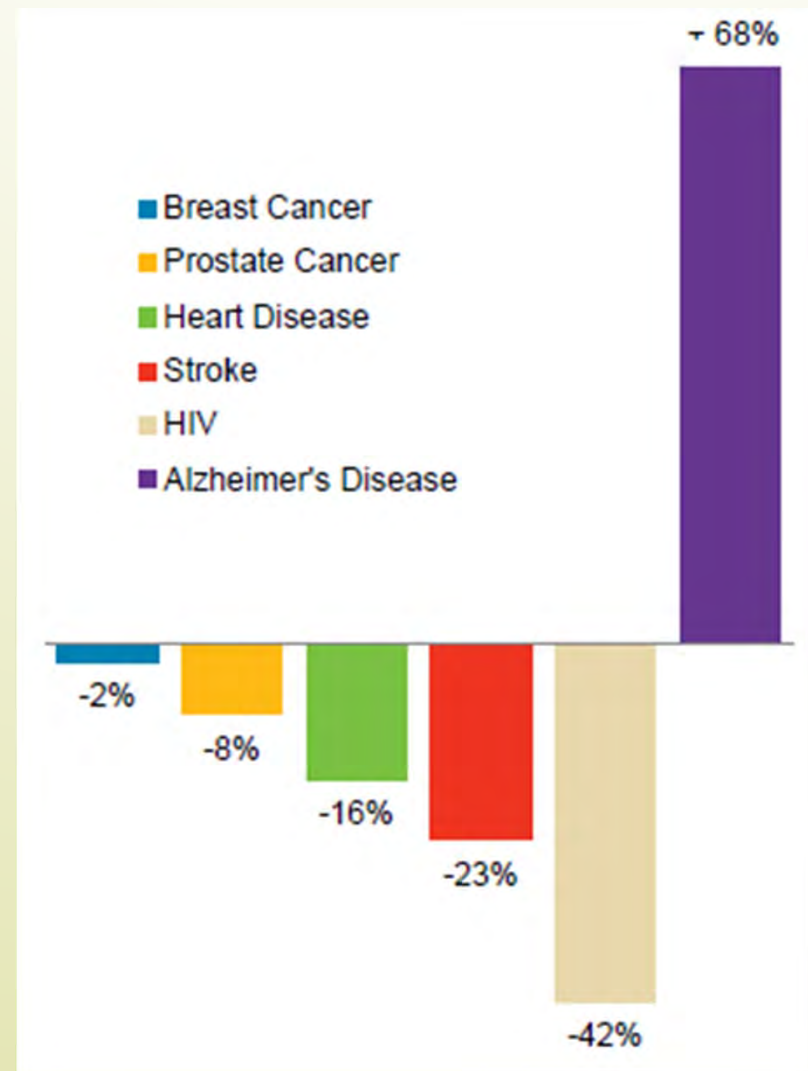
Source: U.S. Census Bureau, 2011 ACS 1-Year

# Long-Term Care Facilities

- ▶ In 2010, about 6% of ND older adults live in skilled nursing facilities.\*
  - The majority of these residents are 85+.
  - Two-thirds of nursing home residents are female.
- ▶ In 2009, ~10% of ND older adults had at least one nursing home stay.\*
  - 30% of residents 85+ had at least one stay.

# Alzheimer's Disease

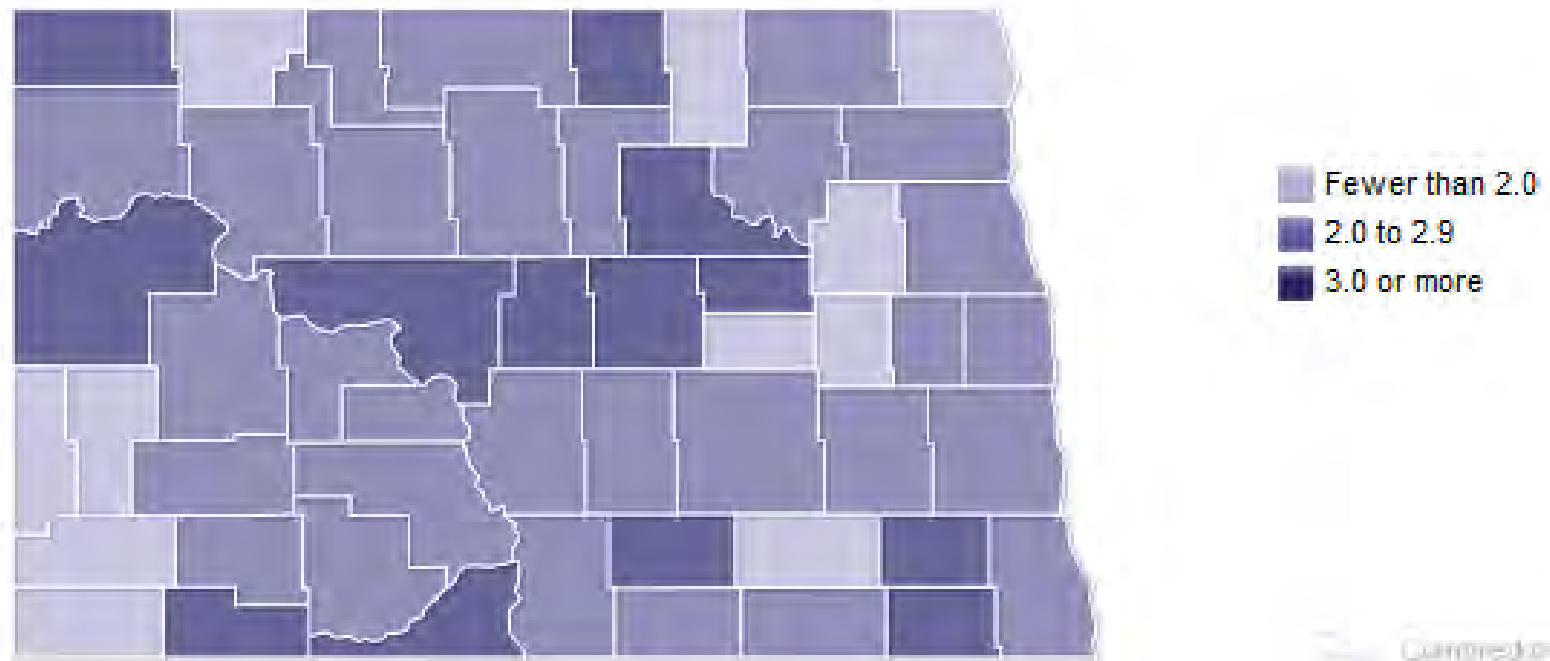
- ▶ Most common form of cognitive impairment.
- ▶ In 2010, ~18,000 ND older adults lived with Alzheimer's:
  - 700 ages 65 to 74
  - 7,700 ages 75 to 84
  - 9,800 ages 85+
- ▶ Nationally, prevalence of Alzheimer's disease:
  - 1 in 9 people ages 65+
  - 1 in 3 people ages 85+
- ▶ Alzheimer's disease is the 6<sup>th</sup> leading cause of death in the U.S. (4<sup>th</sup> in ND) among older adults





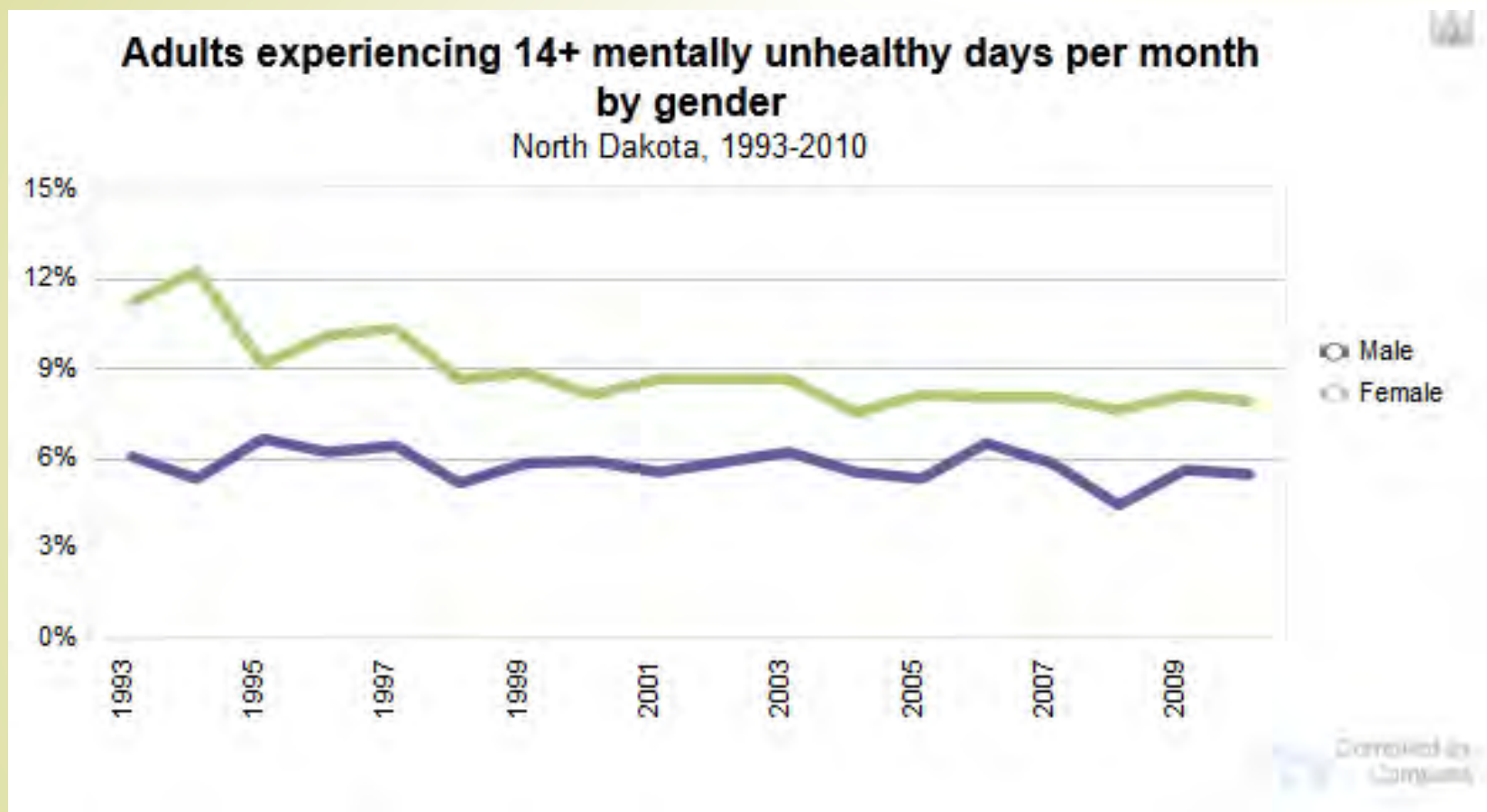
## Adults' (18+) average number of poor mental health days per month by county

North Dakota, 2005-2011



## Mental Health by County »»

On average, North Dakotans had 2.4 mentally unhealthy days per month.  
Differences by county (darkest purple = 3.0+ days/month).

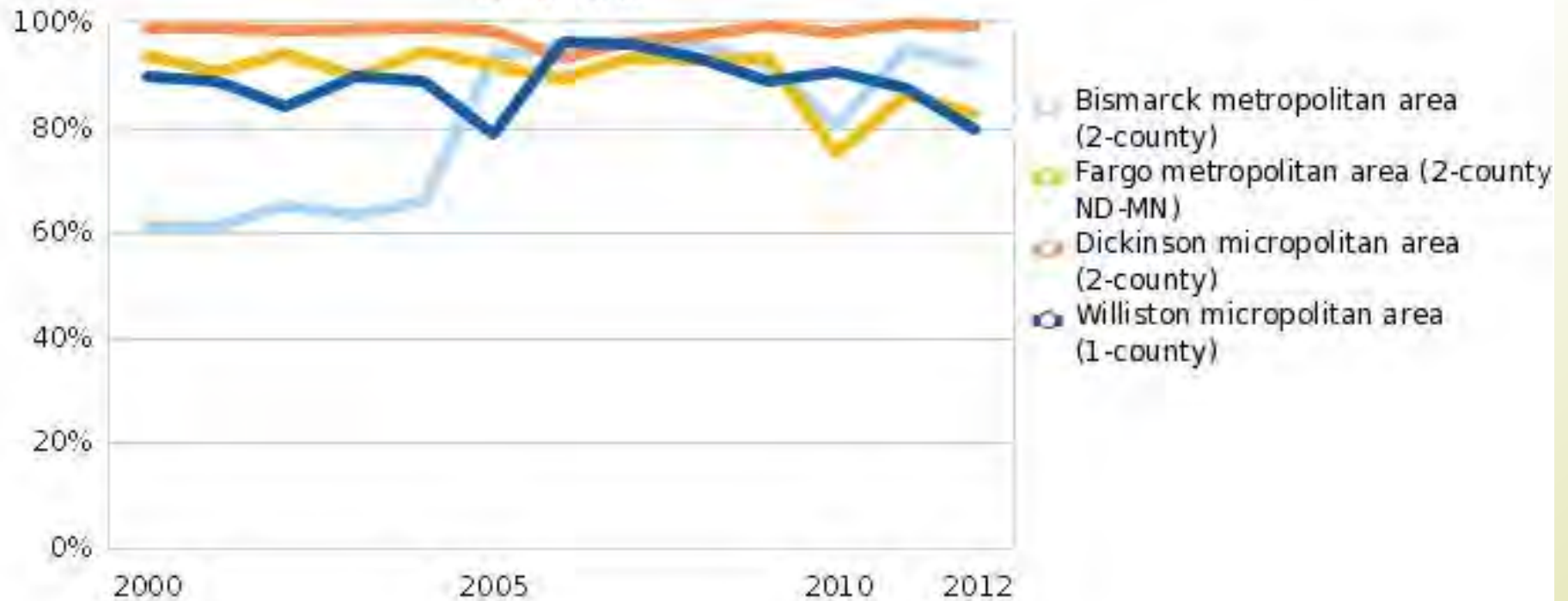


## Mental Health by Gender »»

On average, 6.6% of North Dakotans experienced mentally unhealthy days at least half the month. Differences by gender.

## Days that the Air Quality Index was "Good"

Metropolitan and micropolitan areas in North Dakota,  
2000-2012



## Trends in Air Quality in 4 of ND's Largest Cities >>>

Dickinson - stable.  
Fargo, Bismarck - down/up/down.  
Williston - gradual decline.

... Measuring progress. Inspiring action.



# ND Compass

Compass **gives everyone** in our state  
– policymakers, business and  
community leaders, concerned  
individuals who live and work here –  
a **common foundation** to identify,  
understand, and act on quality of life  
issues that affect our communities.



# ND Compass

- More than 1,000 graphs and tables
- 39 key measures in 12 topic areas
- Data by race, ethnicity, gender, income, and more
- Monthly analysis from researchers and commentary from community leaders and funders
- Twitter feed and Facebook page with breaking data news
- An e-library of recent publications and research-tested strategies

... Measuring progress. Inspiring action.

# Working to Change the Equation

**From:**

*Good intentions +*

*No common base of information =*

***Inefficient decisions***

**To:**

*Good intentions +*

*Sound, credible information +*

*Common sense of purpose =*

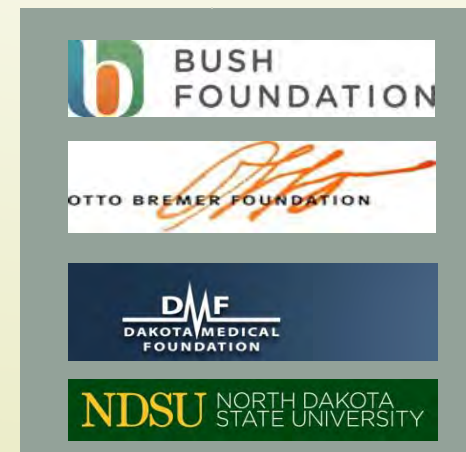
***Productive decisions  
for strong communities***

... Measuring progress. Inspiring action.

# Partnerships

- ▶ Wilder Research – created and operates the award-winning MN Compass site
  - Model for ND Compass
  - Run the “back-end”

- ▶ Funding Partners



... Measuring progress. Inspiring action.

# Input from Stakeholders

- Steering Committee
- Advisory Committee
- Topic-Specific Technical Working Groups

ND Compass engages data users, community stakeholders, and funders to:

Assess relevancy of topics and key measures

: Reflect quality-of-life

: Data availability

Suggest resources

Help champion our site



... Measuring progress. Inspiring action.

# How can you get involved?

- Explore [ndcompass.org](http://ndcompass.org), sign up for the e-newsletter
- Follow us on Facebook ([/ndcompass](https://www.facebook.com/ndcompass)) and Twitter ([@NDCCompass](https://twitter.com/NDCCompass))
- Suggest a resource
- Tell others about Compass
- Serve on a technical working group
- Become a financial supporter

... Measuring progress. Inspiring action.



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## Dr. Richard Rathge

- ▶ Retired earlier this month
- ▶ Former Director of the ND State Data Center at NDSU
- ▶ NDSDC service activities (data requests, presentations, population projections, demographic trends) transitioned to the ND Census Office in the ND Department of Commerce Jan. 1, 2012  
[www.commerce.nd.gov/census](http://www.commerce.nd.gov/census)
- ▶ Research activities transitioned to the CSR at NDSU  
[www.ndsu.edu/csr](http://www.ndsu.edu/csr)

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**NDSU** NORTH DAKOTA  
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