

Demographic and Social Indicator Trends Impacting North Dakota's Counties



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Presentation Objectives:

1. To introduce the social indicators website ND Compass and other resources for county-level data.
2. To examine social indicator trends impacting counties across the state.



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.



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***

TOPICS
Aging Children & Youth Civic Engagement Demographics Disabilities Early Childhood Economy Education
Environment Health Housing Workforce [Log In](#) [Create New](#)

WELCOME TO NORTH DAKOTA COMPASS
By tracking and analyzing trends in areas that affect our quality of life, Compass gives everyone in our state – policymakers, business and community leaders, and concerned individuals who live and work here – a common foundation to act on issues to improve our communities. [MORE >](#)

STAY INFORMED
Enter your email to sign up for our e-newsletter

FOR DISCUSSION
Rural Development in North Dakota
Jasper Schneider, Director for USDA Rural Development (USDA-RD) in North Dakota, answers some questions for ND Compass about our state's rural areas. [READ MORE >](#)

ASK A RESEARCHER
Western North Dakota School Administrators Face Challenges
Nancy Froder, an assistant research professor with NDSU's Department of Agribusiness and Applied Economics, discusses the impact on local school districts due to the rapidly expanding petroleum sector in western North Dakota. [READ MORE >](#)

COMPASS NEWS
ND Compass
103

HOW TO USE THIS SITE
ND Compass explores a set of key measures for each topic area. In addition to tracking statewide trends, Compass provides data, when possible, by region, county, reservations, and larger cities (click on the map above or here to see more details). Within each topic, click on a key measure and choose "breakdown" to see what specific indicators, geographies, and characteristics are available. To find more detailed information, including data sources, definitions, or qualifications, go to the "View" dropdown menu found above each key measure graph and choose "Data & notes." Links to additional data can be found under More Measures. Additional resources are available under Ideas at Work and the Library. Learn more about the project, who's involved, and the data.
Also, read the May 2013 Ask a Researcher piece. Learn how to make the ND Compass website work for you.



ND Compass

www.ndcompass.org

- A one-stop social indicators website in North Dakota with tools to help access and interpret data.
 - 12 topic areas → 39 key measures
 - More than 1,000 graphs and tables
 - Data by state, region, county, metro/micro areas, reservations
 - Data by race, ethnicity, gender, income, and more
 - Exportable for use in presentations
 - Additional resources in More Measures and Ideas at Work
 - Monthly guest columns providing analysis and commentary
 - Twitter feed and Facebook page with breaking data news
 - An e-library of recent publications, research-tested strategies

A platform for data-driven decision making

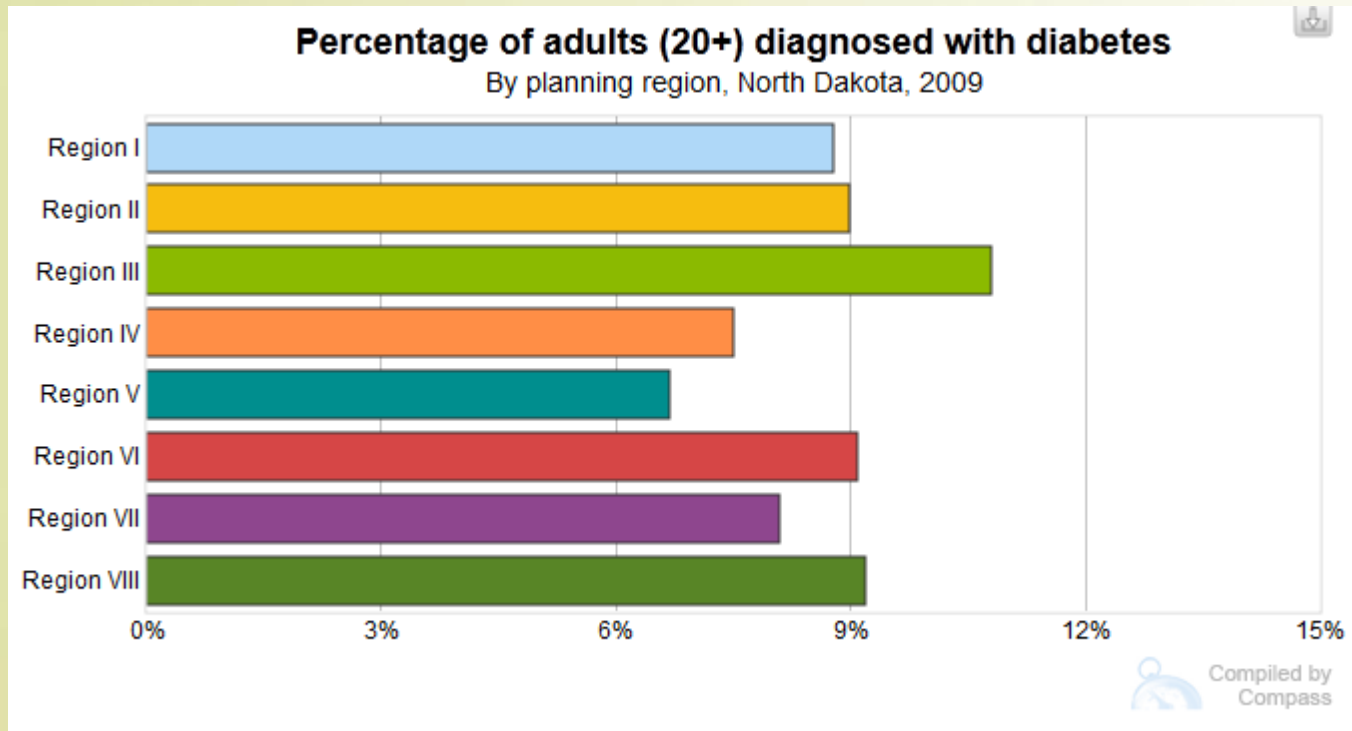
▶ Data Helps:

- Make informed decisions
 - Where to focus efforts
 - Where to allocate resources
- Secure funding
 - Motivate supporters to act and contribute
 - Make a case to funding organizations
- Determine if you are having the impact you seek
 - Tweak processes along the way if necessary

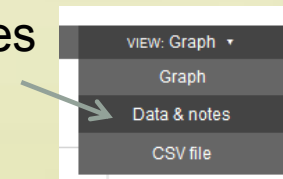
Topic areas and key measures currently on ND Compass...

- ▶ **Aging**
 - Disability ages 65+, median income, volunteerism older adults
- ▶ **Children & Youth**
 - Population trends, Connection to adults, Youth use of alcohol, Youth sexual activity
- ▶ **Civic Engagement**
 - Voter turnout, Volunteerism
- ▶ **Demographics**
 - Population, Age, Race, Disability
- ▶ **Disparities**
 - Age, Gender, Income, Native American Reservation Area, Race
- ▶ **Early Childhood**
 - Low birth weight, Preschool enrollment, Children with working parents
- ▶ **Economy**
 - Economic output (GDP), Jobs, Median income, Poverty
- ▶ **Education**
 - 3rd grade reading scores, 8th grade math scores, High school graduation
- ▶ **Environment**
 - Air quality
- ▶ **Health**
 - Diabetes, Obesity, Health care coverage, Mental health
- ▶ **Housing**
 - Cost-burdened households, Homeownership rate, Homeless persons
- ▶ **Workforce**
 - Postsecondary degree completion, Educational attainment, Proportion of adults working

Compass serves as a data curator and a discussion starter



- Engaging graphs, use in your own presentations
- Detailed and historical data in the “Data and notes” tables



A Dynamic Site, Always Under Development

- Topics under development:
 - Public Safety
 - Transportation
- Toolkit under construction:
 - Community Building
- ▶ Geographic profiles
- ▶ Color scheme
- Data updates occur frequently
- New resources are continuously being added
- On-going Facebook posts and Tweets reflecting timely research and data
- New topics are explored every month in our columns and newsletter

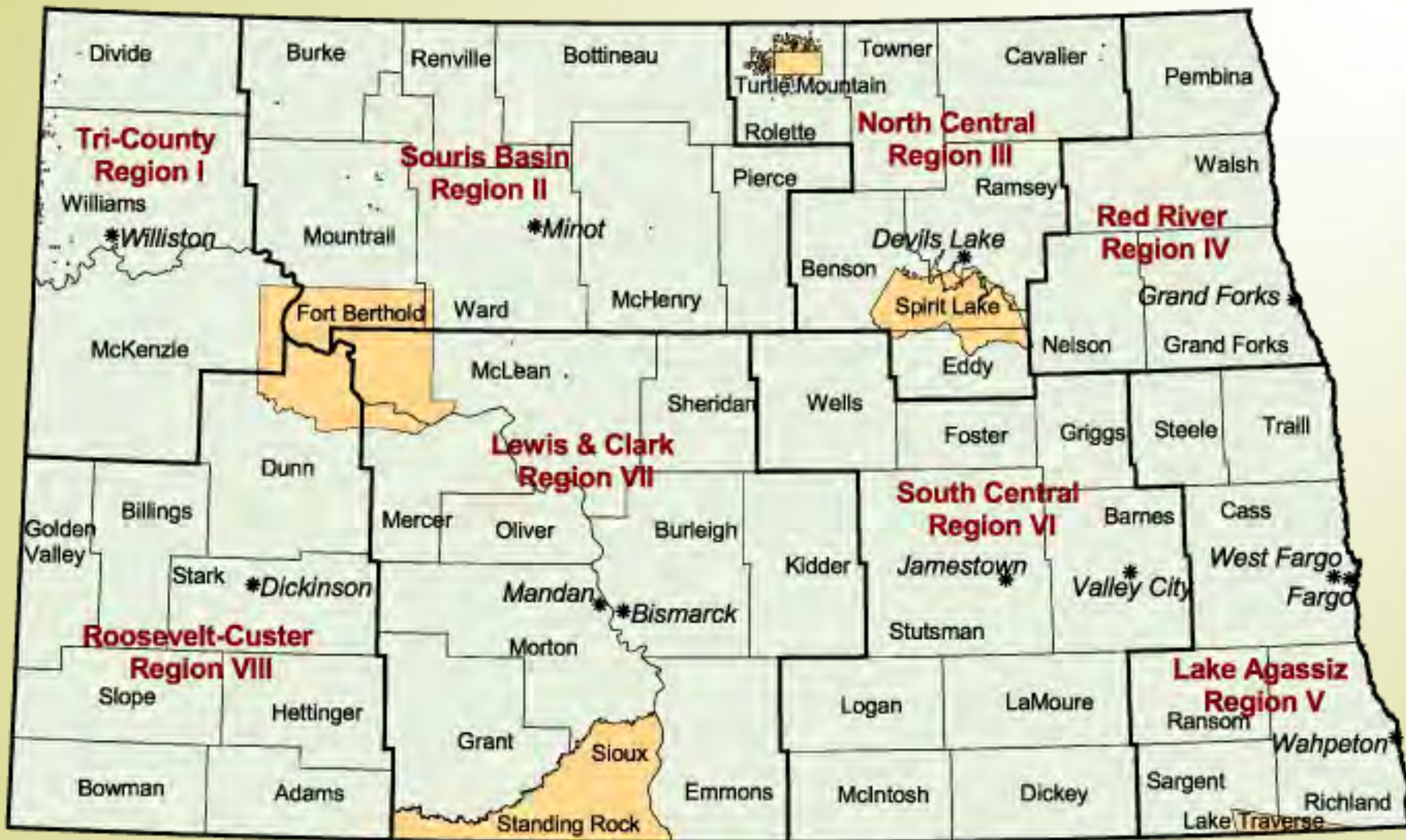


Input from Stakeholders

- 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
 - Partnership with Wilder Research which runs back-end of the Compass sites

Current Funding Partners





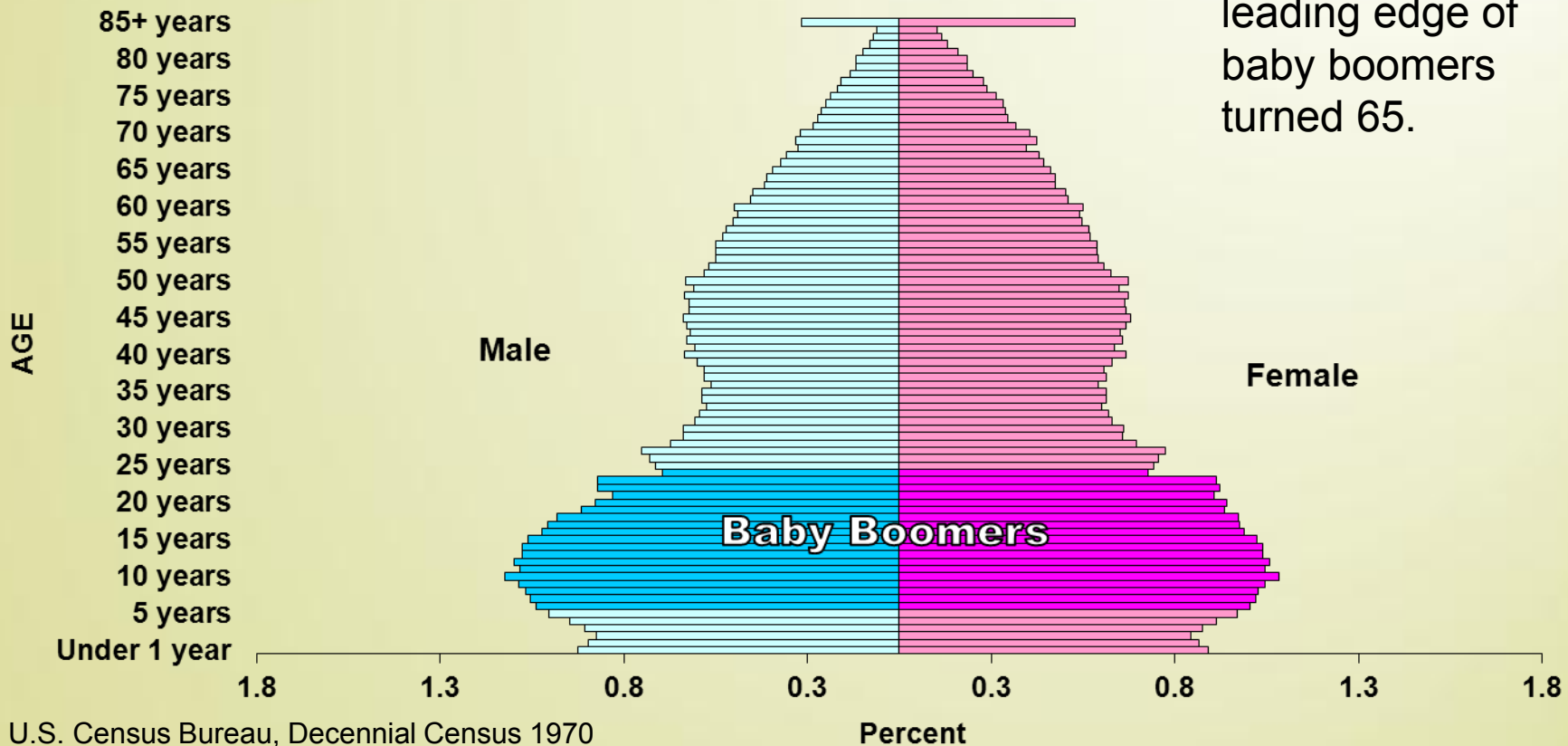
Statewide Trends

- » Statewide dynamics that impact our counties

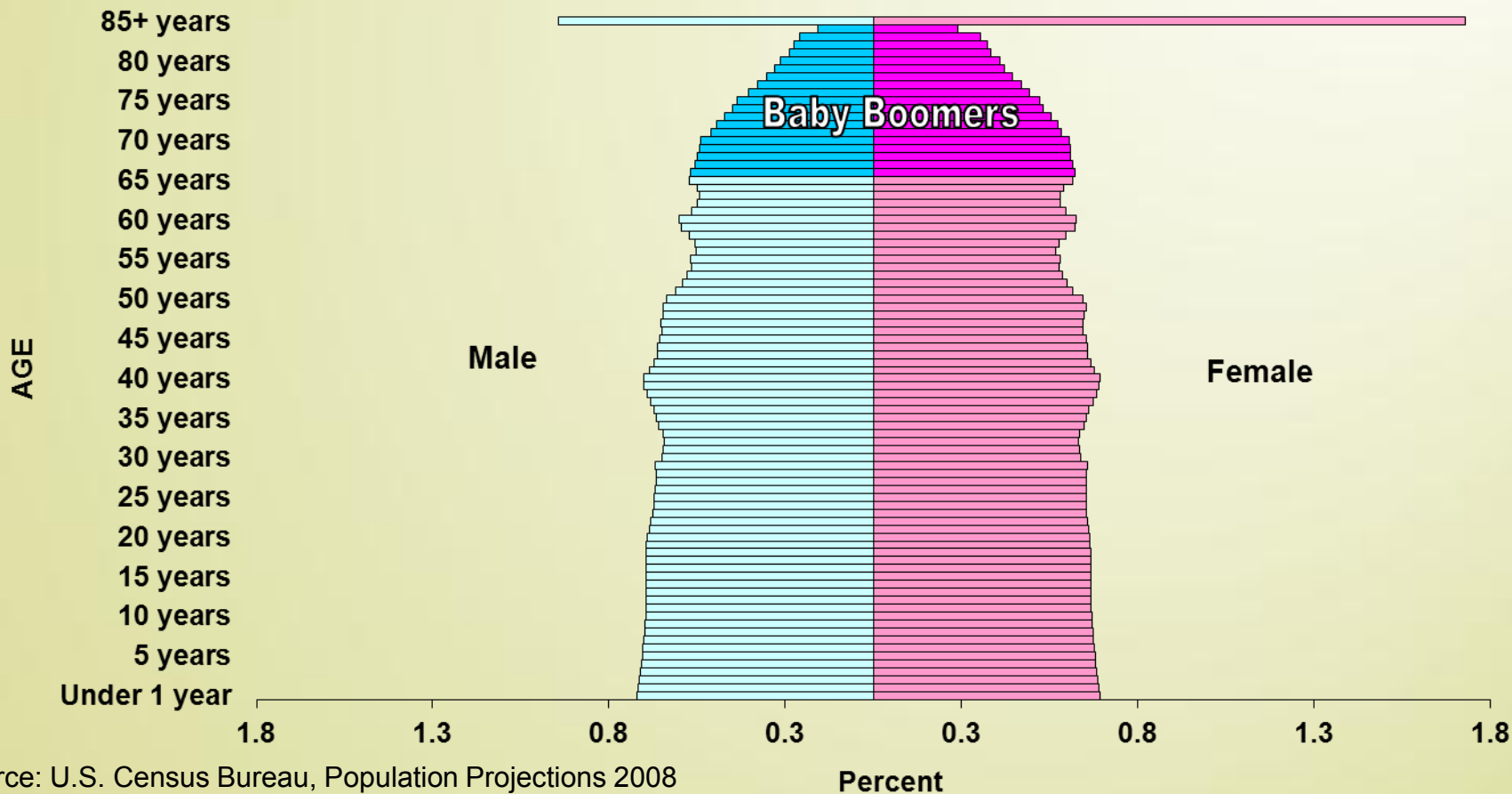
The Shifting Demographic Landscape in North Dakota

- ▶ Robust economic climate has created opportunities but also challenges for western ND
 - Strain on service delivery
 - Inflated housing demand (higher rents, higher property taxes)
 - Rising school enrollments
 - Dynamic population
- ▶ Shifting concentration of seniors
 - Aging of baby boomers
 - Population loss or mixed growth

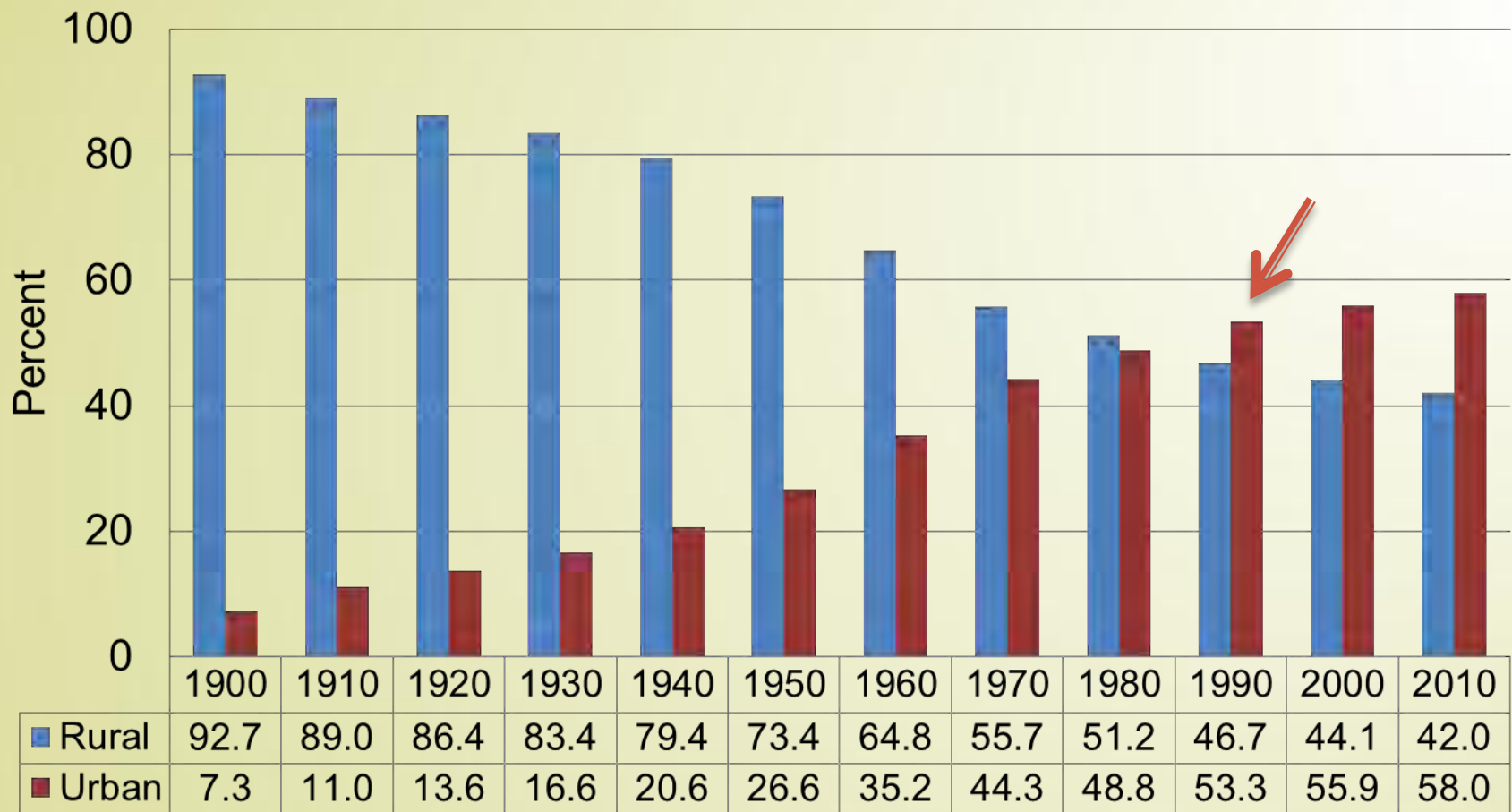
Population by Single Year of Age and Sex in the U.S. : 1970



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



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

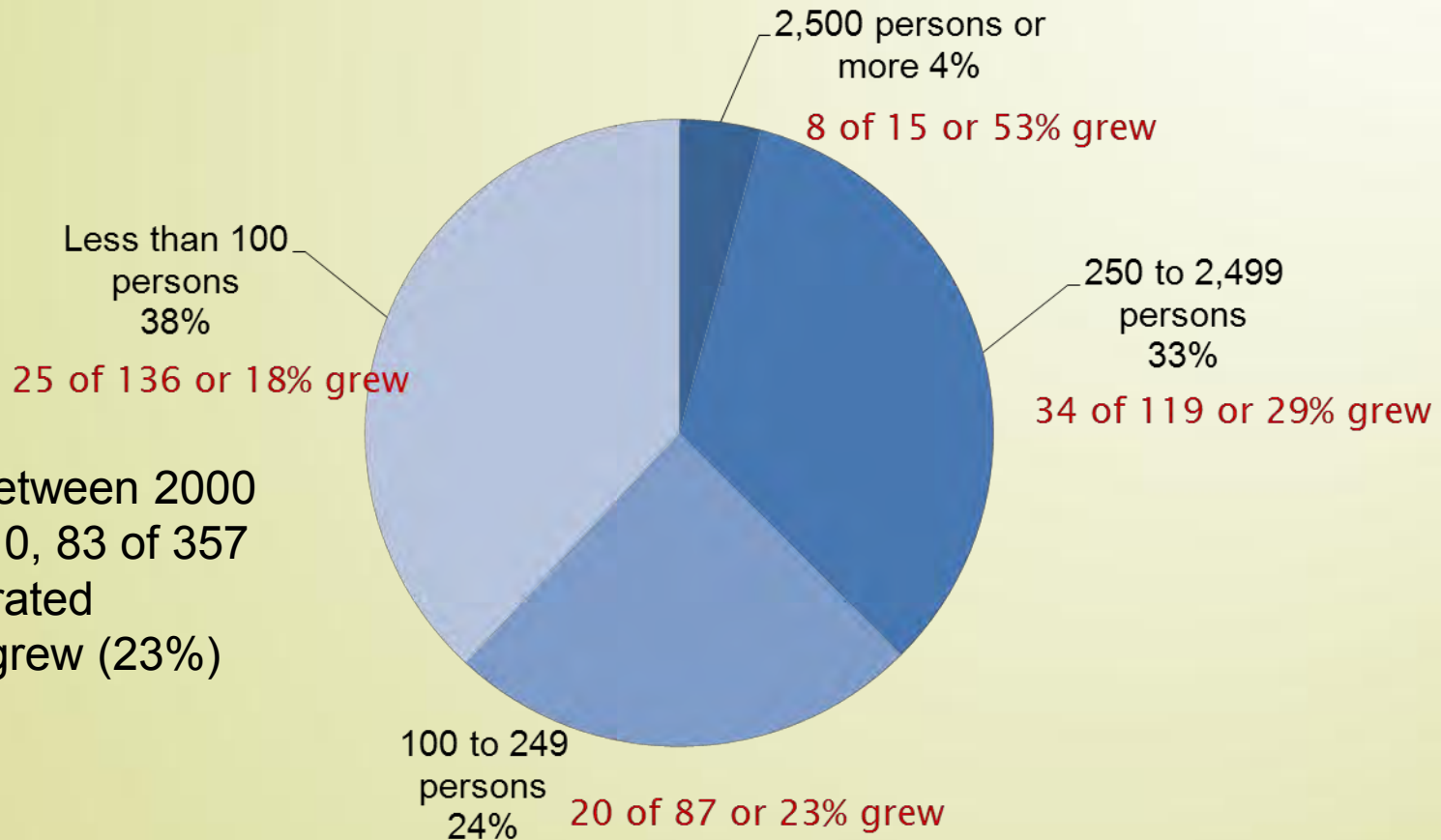


ND Rural-Urban Population Distribution >>

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

City Size in North Dakota: 2010

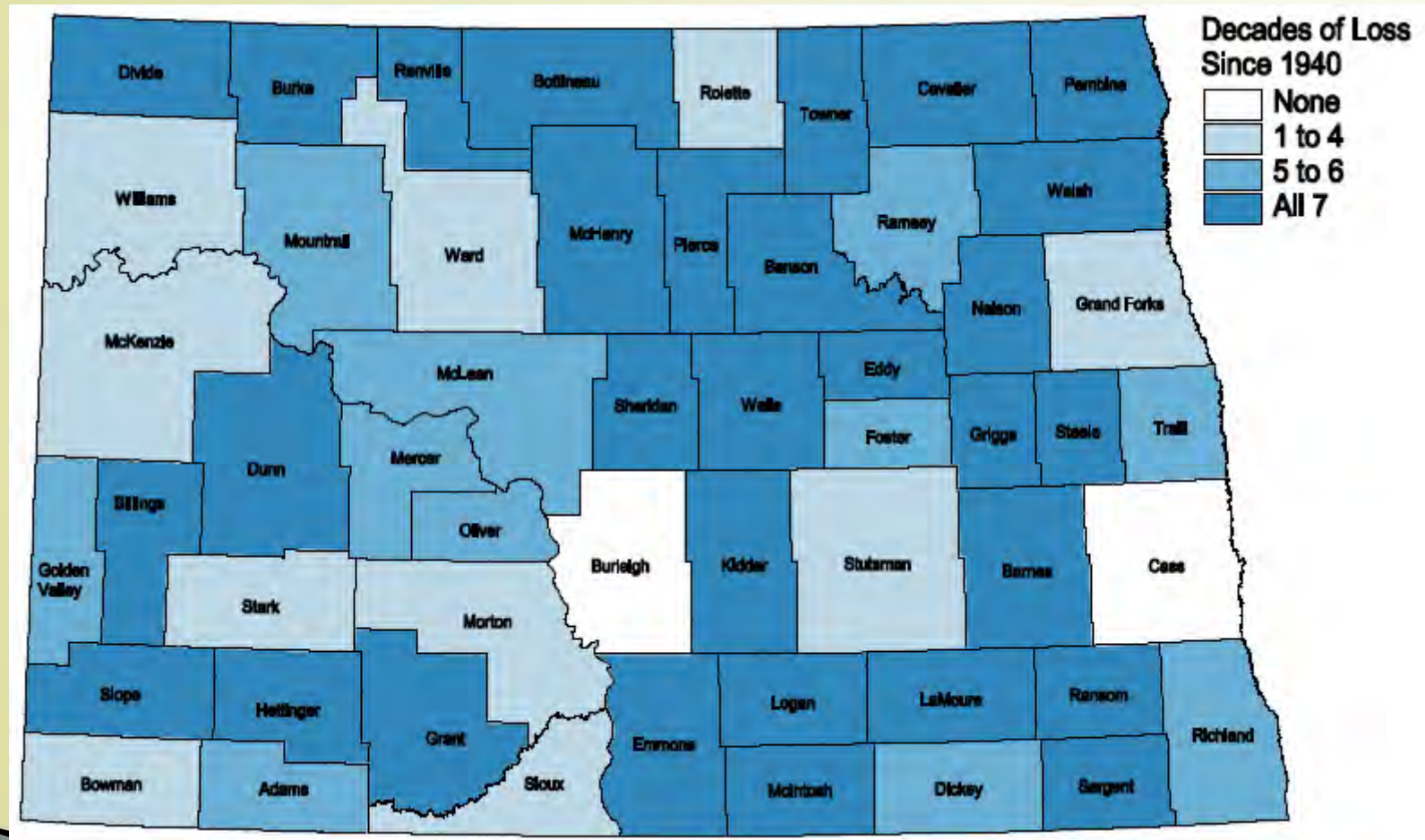
% change 2000 to 2010 noted in red



Note: Between 2000 and 2010, 83 of 357 incorporated places grew (23%)

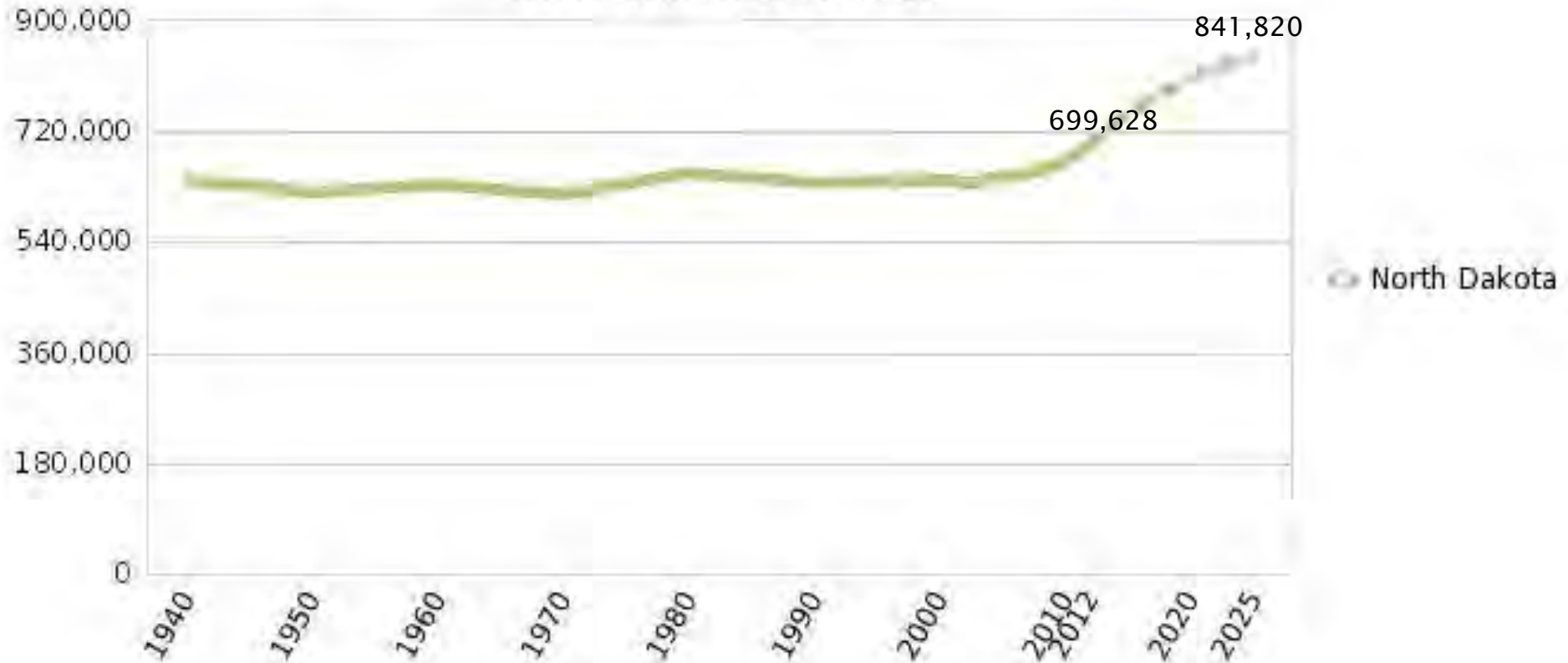
Note: Based on 357 incorporated cities
Source: U.S. Census Bureau, Census 2010

All but 2 counties experienced population decline in at least one decade since 1940; 30 in all 7 decades



Total population, trend and forecast

North Dakota, 1940-2025

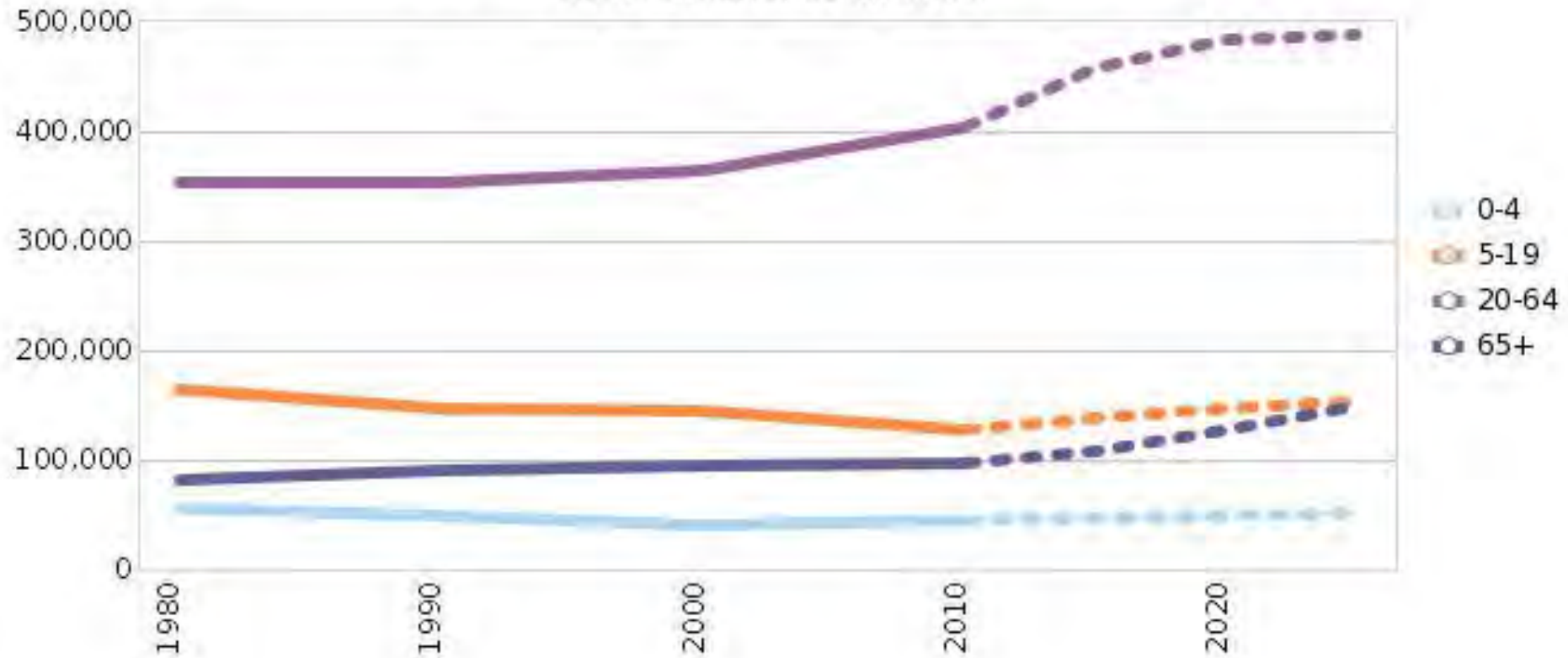


- ND reached a historic high in 2012 – 699,628.

- Previous peak was in 1930 at 680,845.
- Projected to reach 841,820 by 2025.

Population by select age groups, trend and forecast

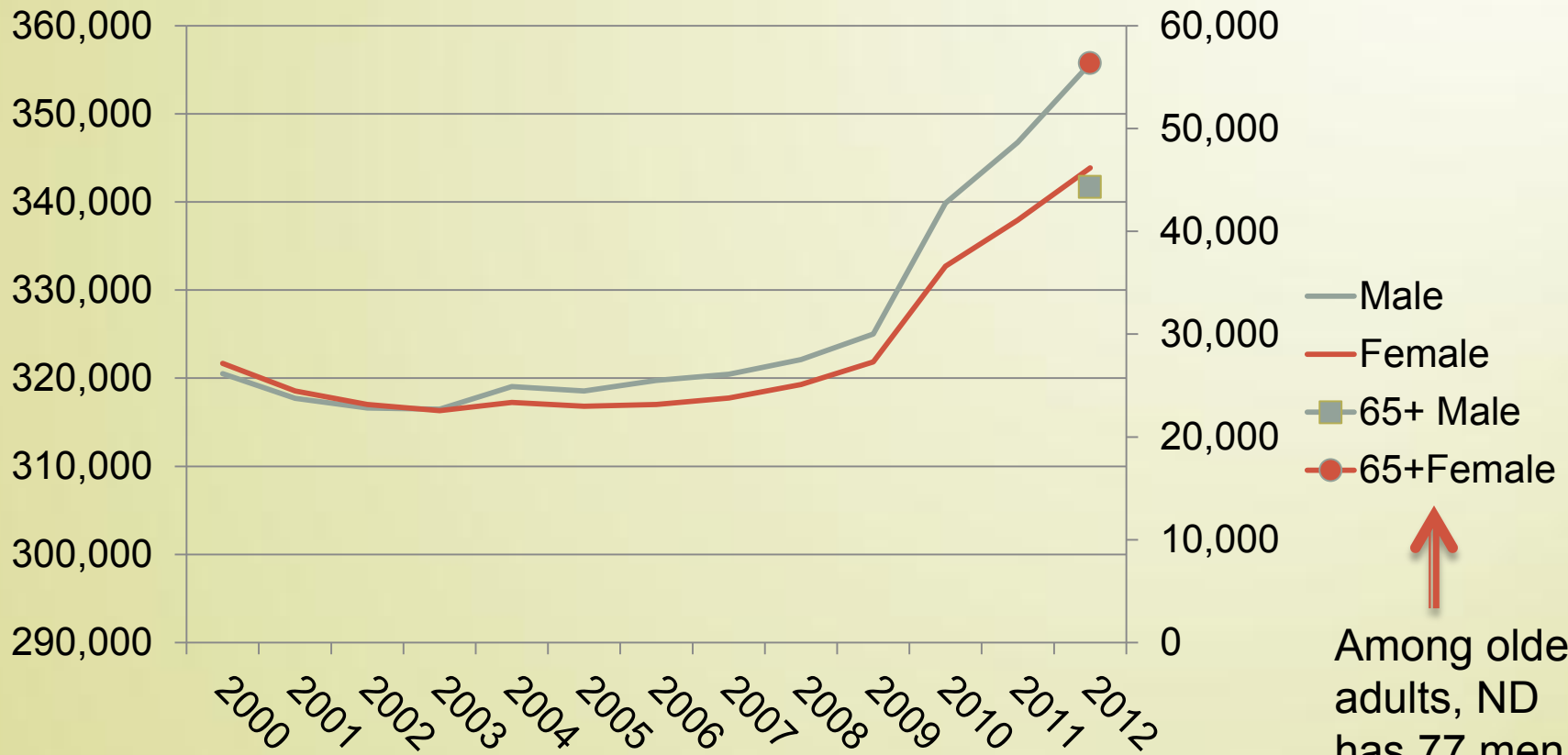
North Dakota, 1980-2025



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

Gender Distribution in ND

In the Fargo metro area, in contrast, the overall gender ratio is 50/50.

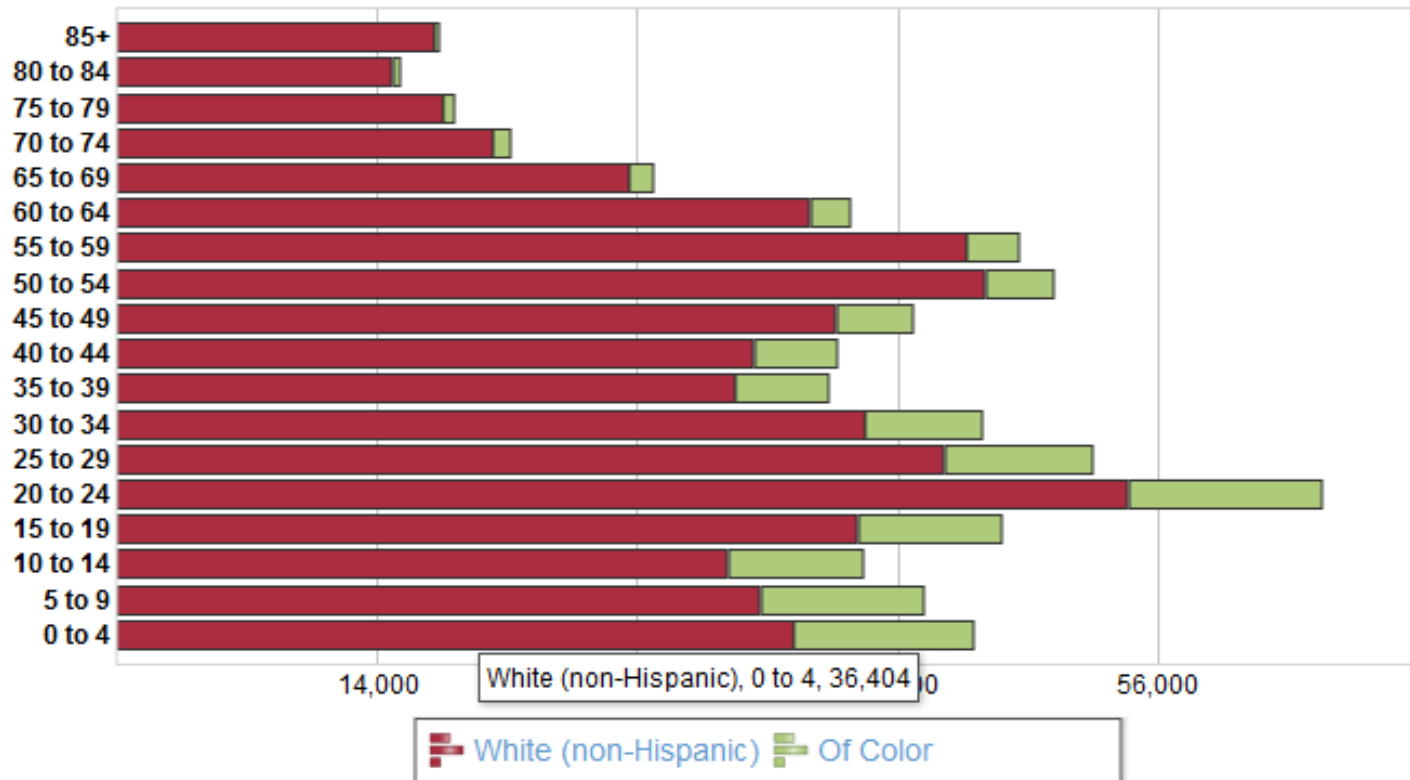


Source: U.S. Census Bureau, Population Division

Among older adults, ND has 77 men for every 100 women.

Population by age and race

North Dakota, 2012

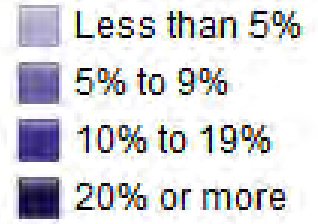
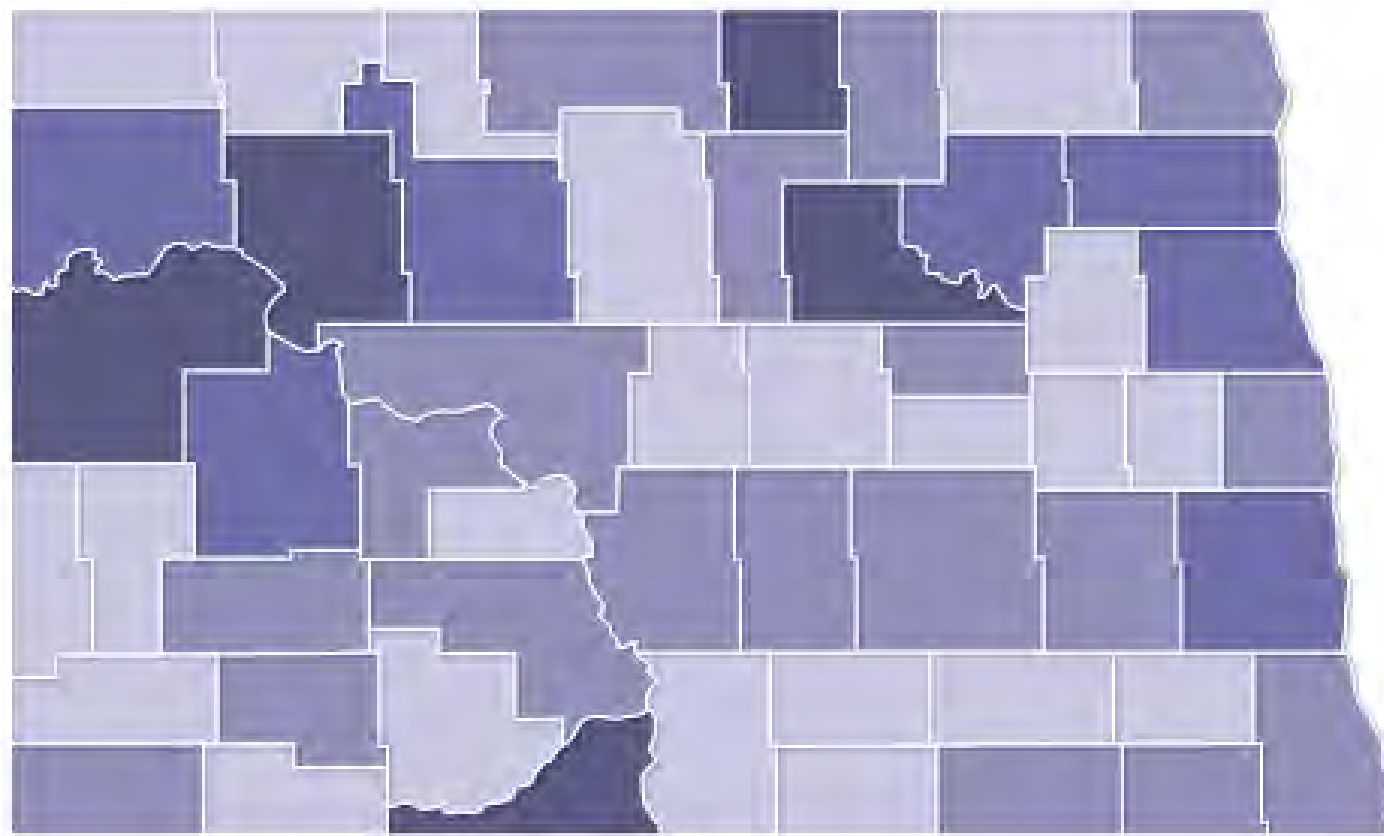


Population Diversity »»

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

Persons of Color as a percent of the population

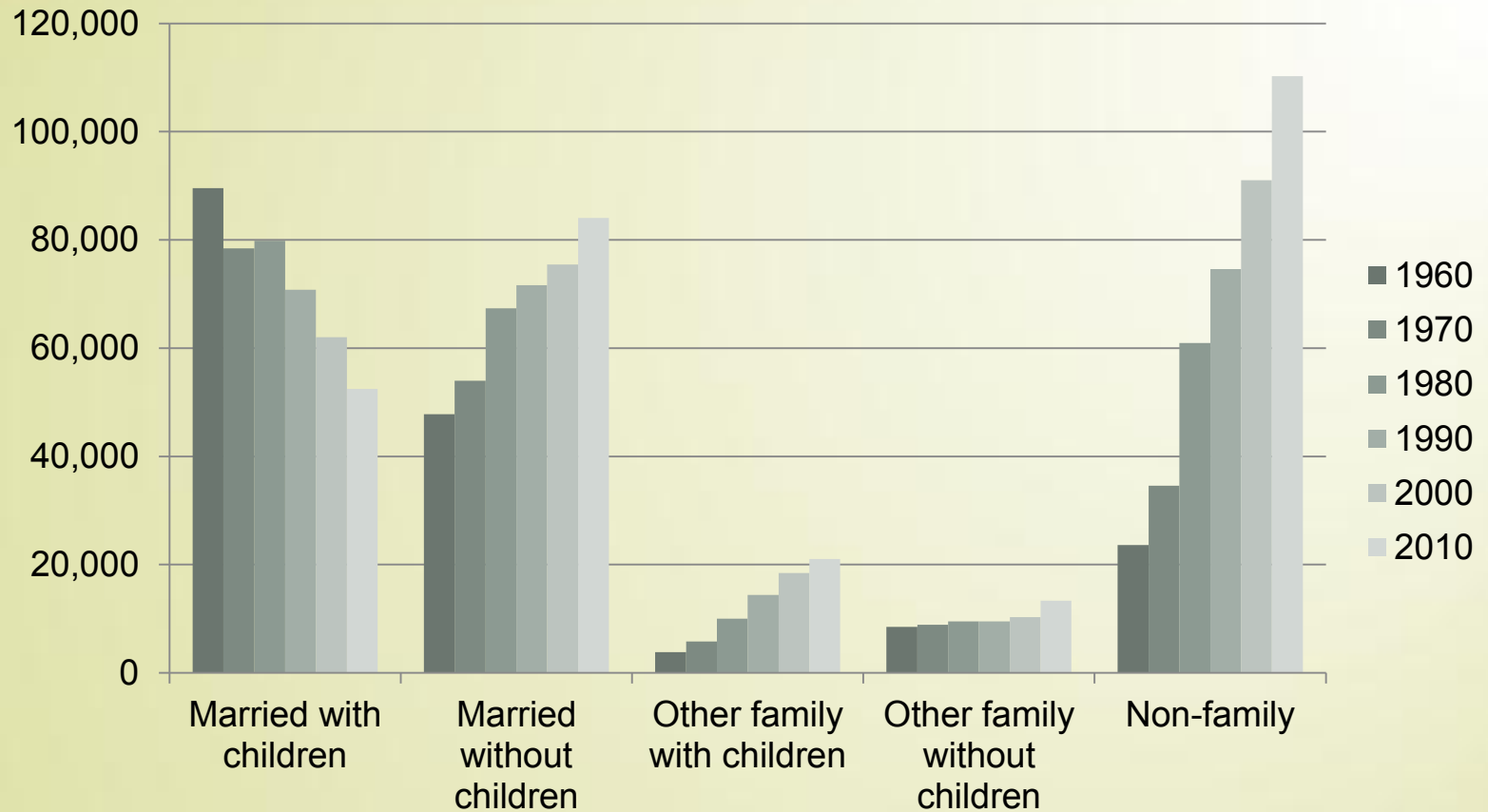
North Dakota counties, 2012



Compiled by
Compass

- Proportion of the population in counties that is “of color” ranges from less than 1.7% to 86.6% or more

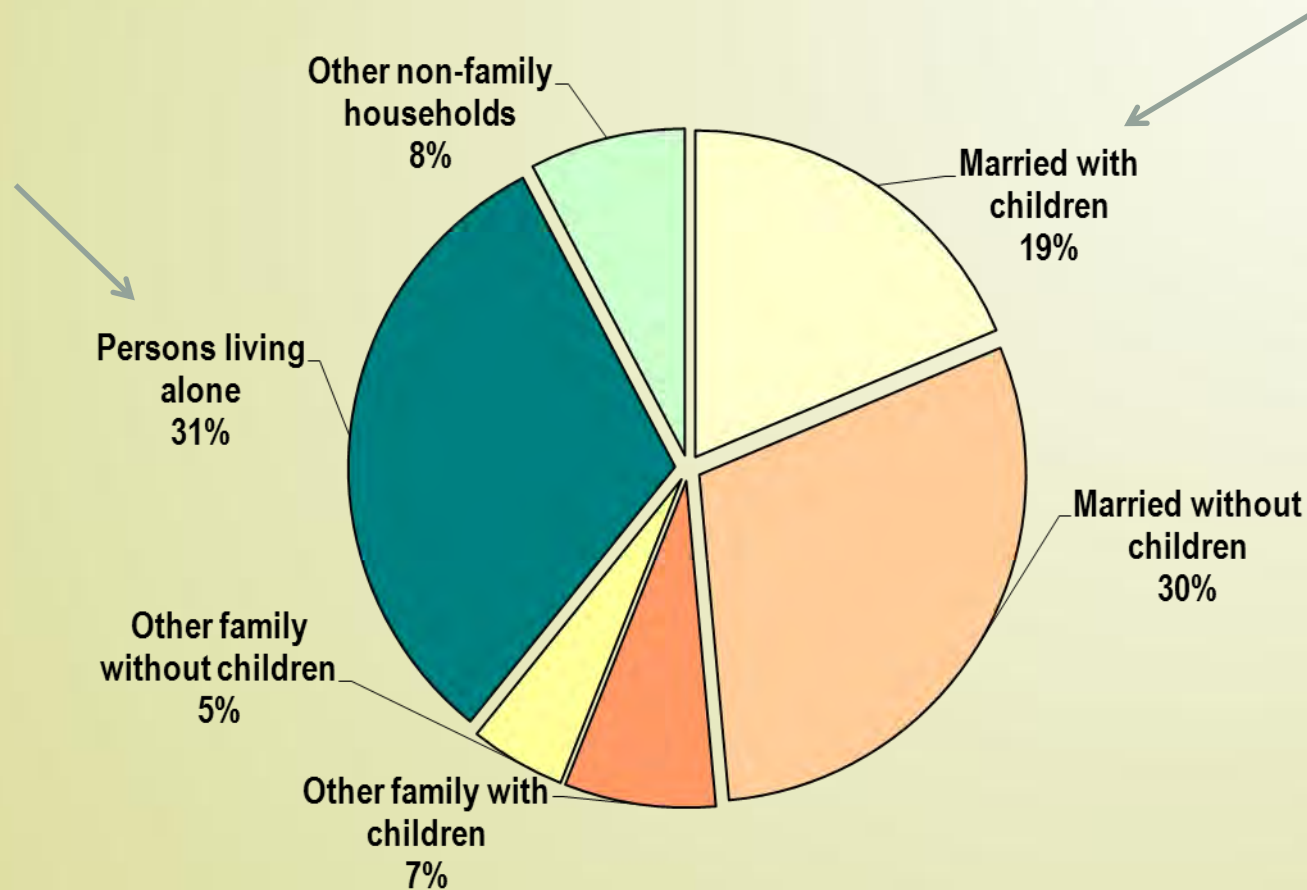
ND Households by Type



Households by Type >>

Dramatic shifts over the past several decades include 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 North Dakota: 2010



Source: U.S. Census Bureau

Local context

» Strengths and opportunities

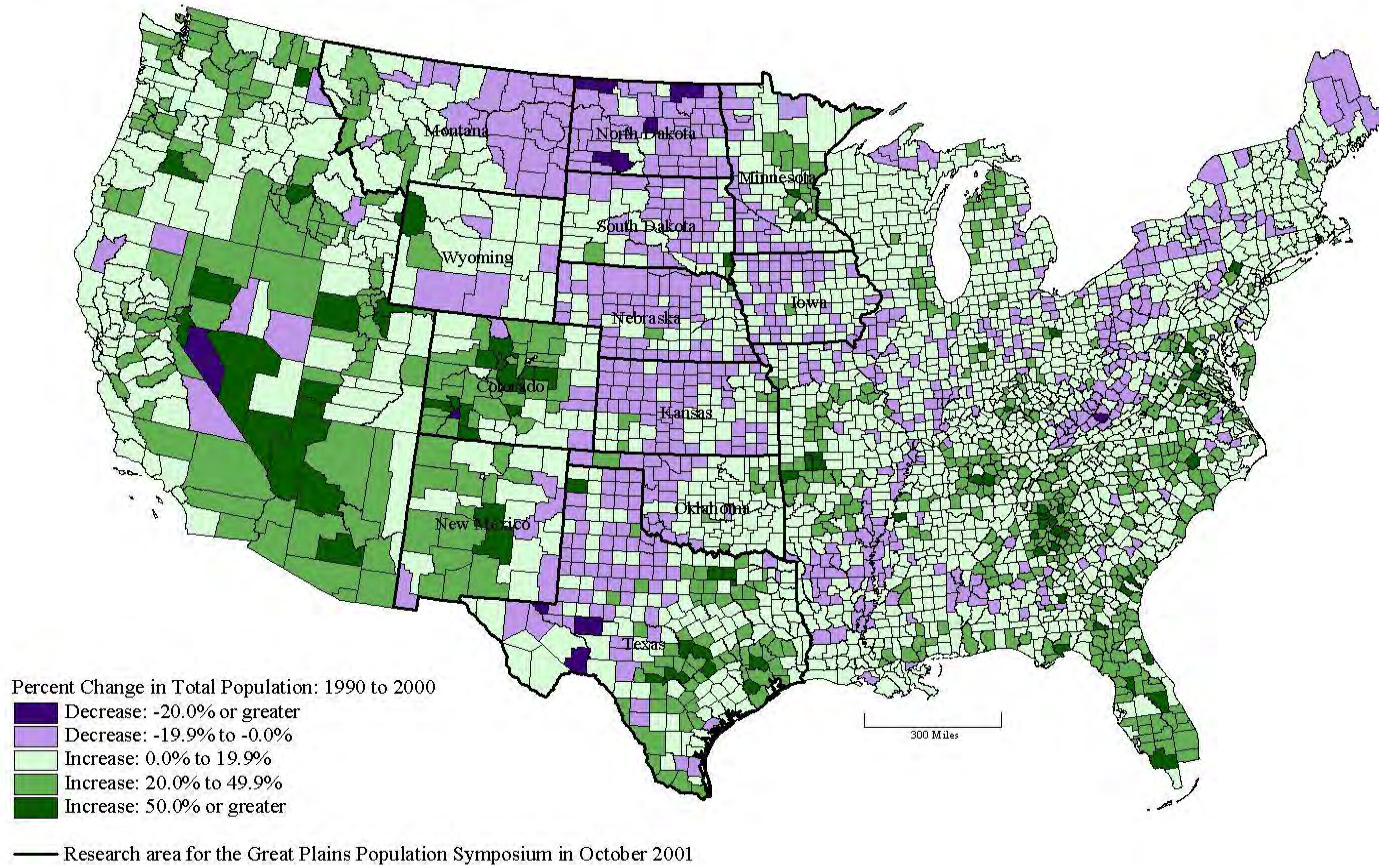
Social indicators relating to:

- ▶ Population trends
- ▶ Health trends
- ▶ Aging population
- ▶ Housing
- ▶ Working parents and need for child care
- ▶ School preparedness and outcomes

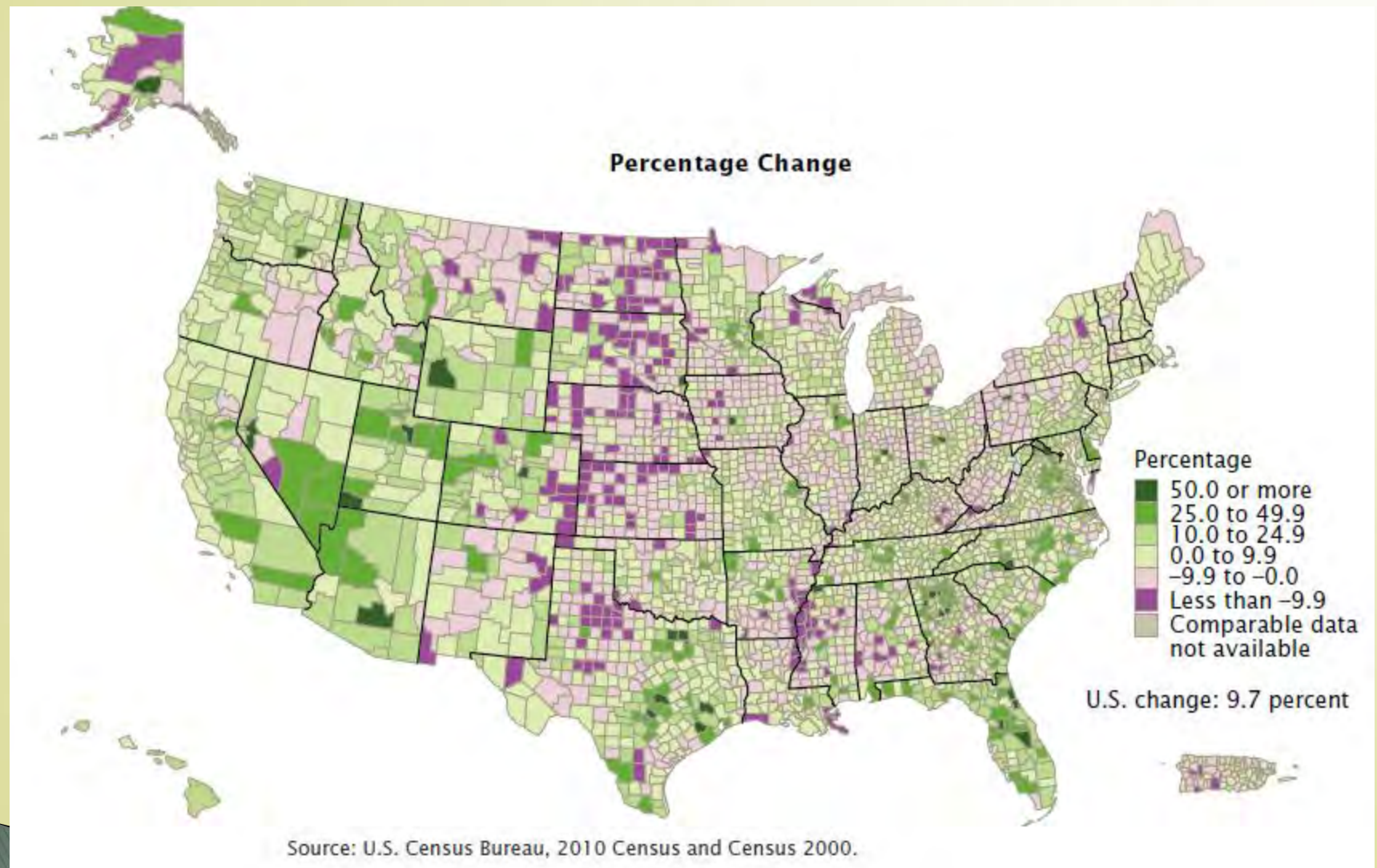
Percent Change in Population: 1990 to 2000

Figure 2. Percent Change in Total Population for the U.S. by County: 1990 to 2000

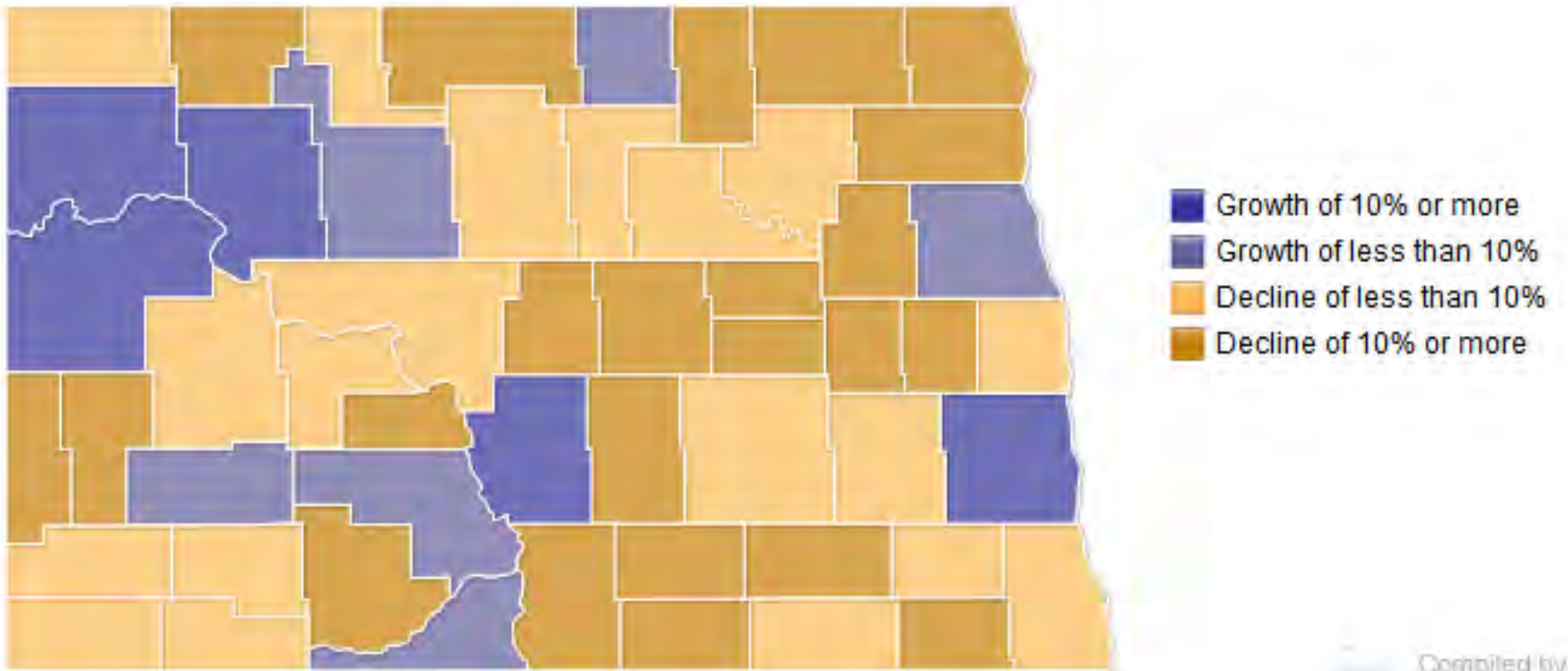
Source: U.S. Census Bureau, 1990 and 2000 Decennial Census



Percent Change in Population: 2000 to 2010

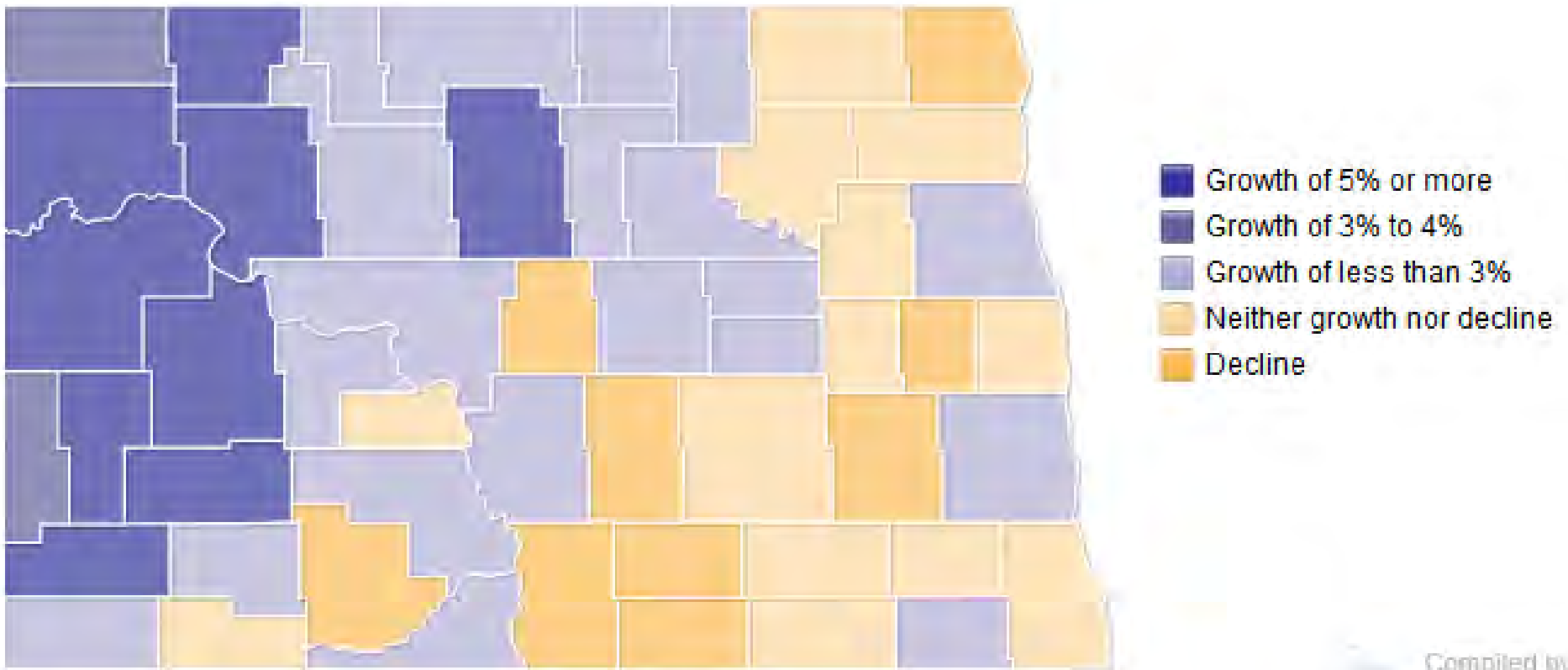


Percent Change in Population: 2000 to 2010



- Only 11 of 53 counties gained population between 2000 - 2010

% Change in Population: 2011–2012

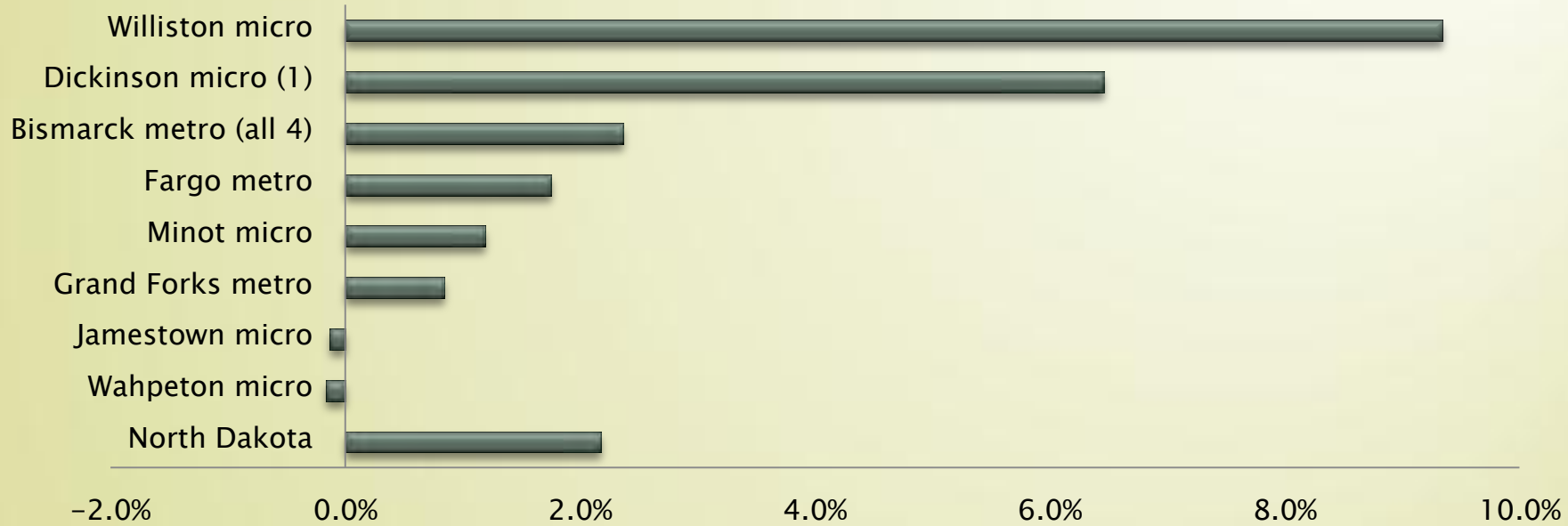


Compiled by
Compass

- ND's population grew 2.2% from 2011 to 2012, the fastest growth among all states; 38 of 53 ND counties gained population from 2011 to 2012.
- Population loss still a reality for many counties.

6 of 8 metro/micro areas are growing; overall growth of 2.2%

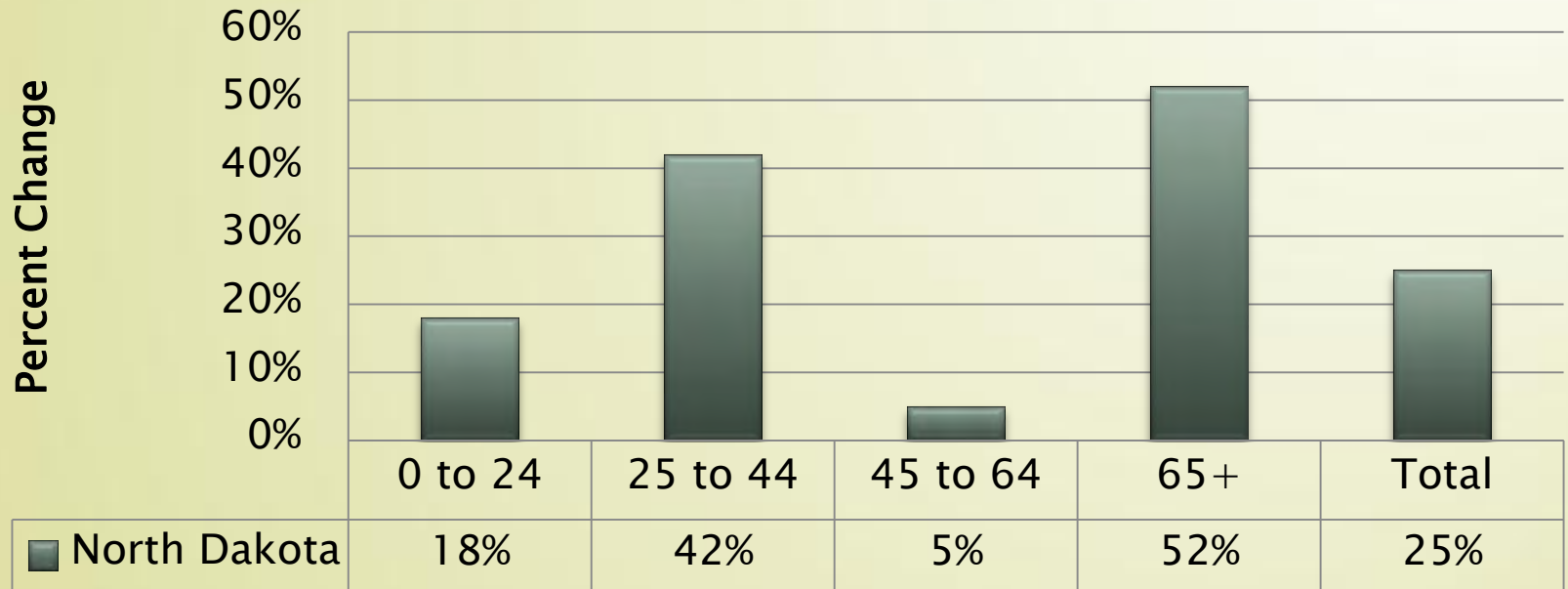
Population Change, 2011-2012



	North Dakota	Wahpeton micro	Jamestown micro	Grand Forks metro	Minot micro	Fargo metro	Bismarck metro (all 4)	Dickinson micro (1)	Williston micro
■ 2011-2012	2.2%	-0.2%	-0.1%	0.8%	1.2%	1.8%	2.4%	6.5%	9.3%

Population Projected to Increase

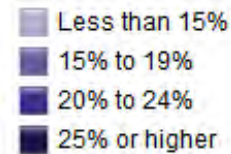
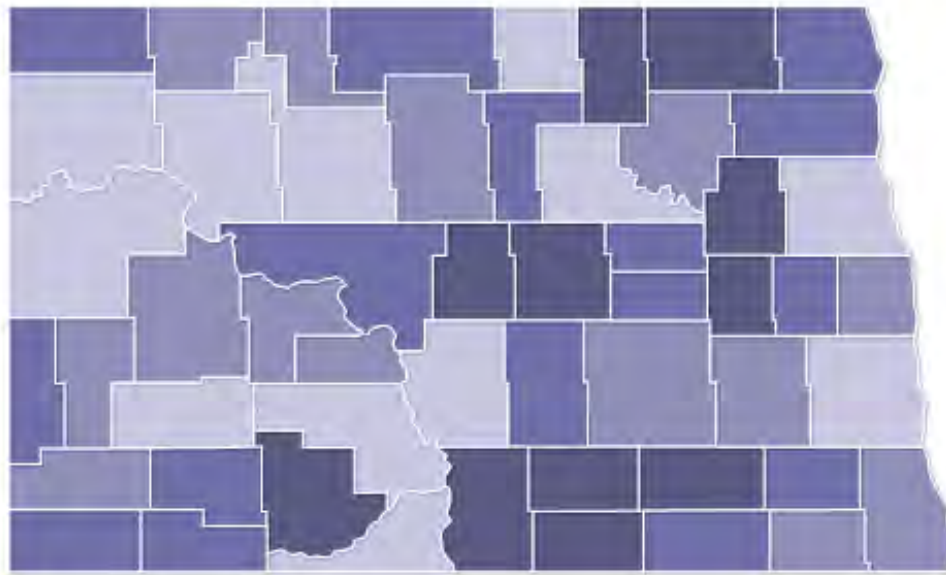
Percent Change in Population by Age, 2010 to 2025



- Increases in other age groups (largely due to oil boom) lessening “graying of ND” that once seemed inevitable.

Percent of population age 65+

North Dakota counties, 2012



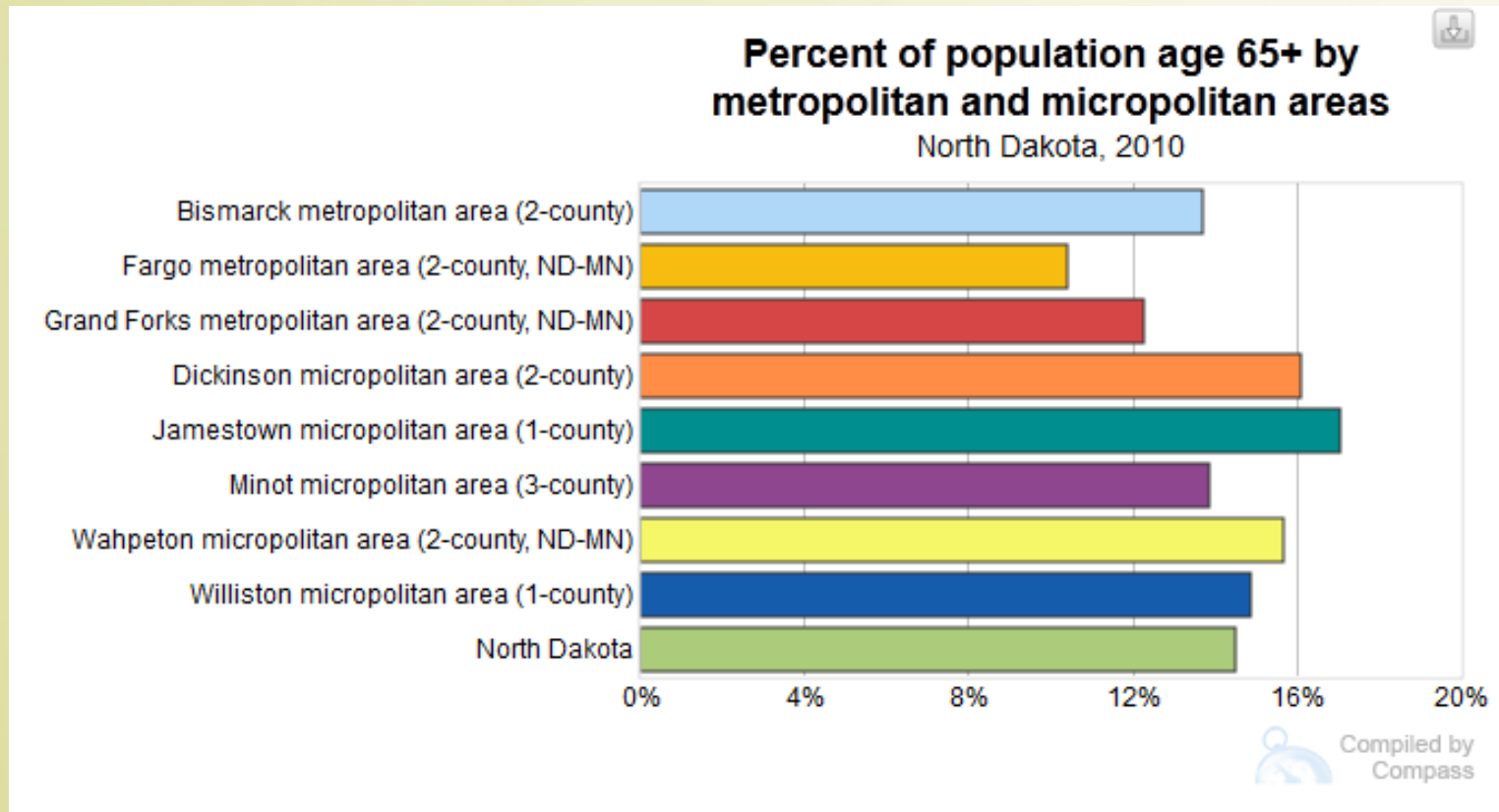
Percent of population age 65+

Rank of counties, North Dakota, 2012

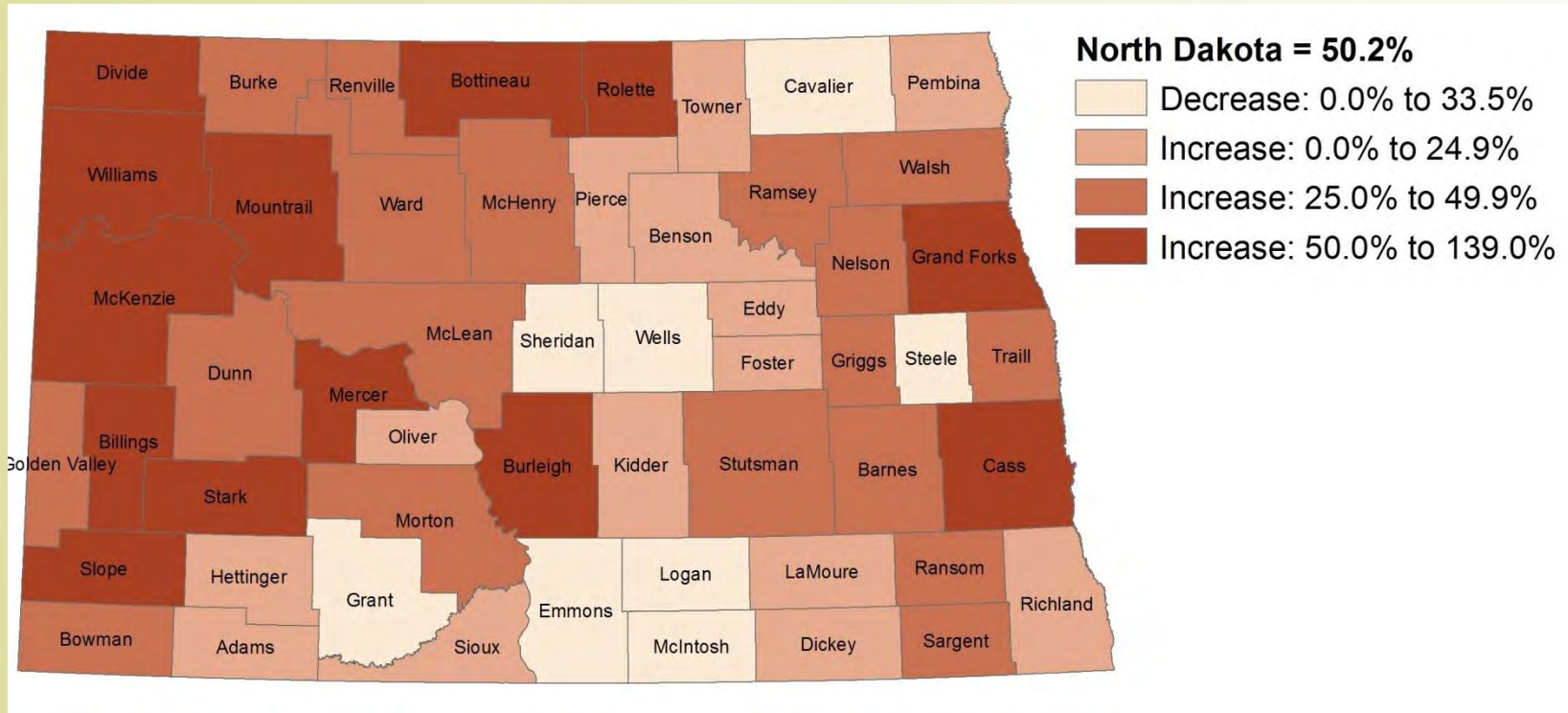
Rank	County (1=greatest proportion age 65+)	2012
1	McIntosh	33.3%
2	Sheridan	30.6%
3	Griggs	27.7%
4	Grant	27.6%
5	Wells	27.5%
6	Emmons	27.3%
7	Logan	27.3%
8	Nelson	27.2%
9	Cavalier	25.7%
10	LaMoure	25.0%

- ▶ 14% of the population is 65+
- ▶ As high as 33% in McIntosh County

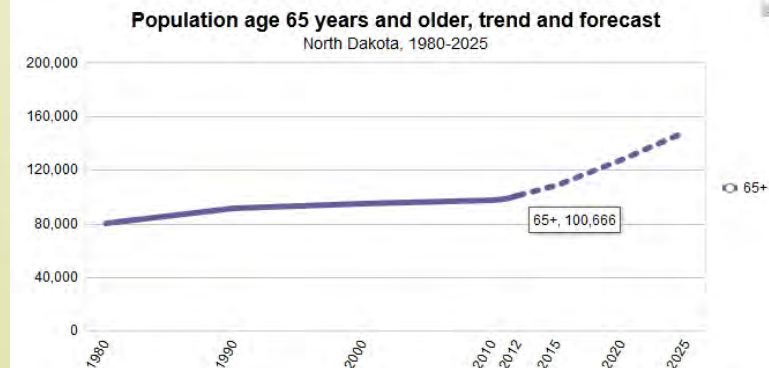
Fargo metro has smallest *proportion* of seniors (10.4%) but largest *number* (21,628)



Projected Percent Change in Ages 65+: 2011 to 2025

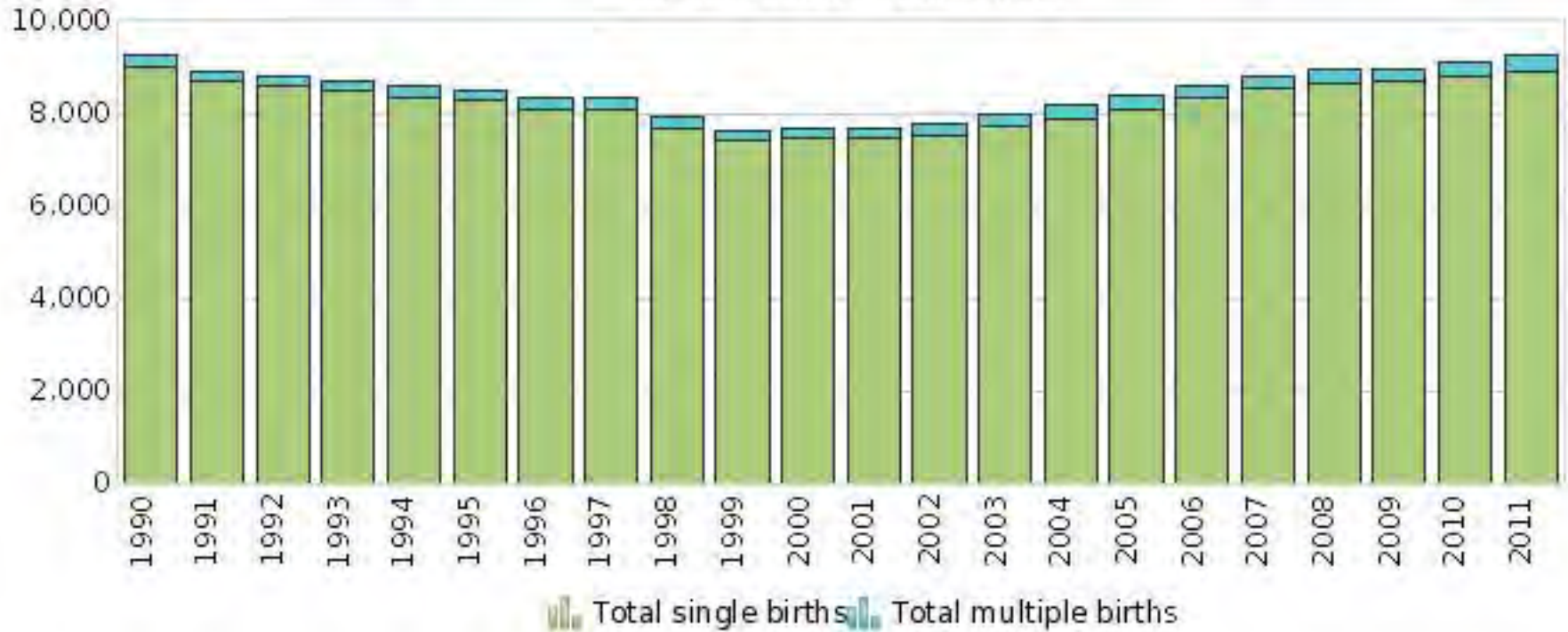


- ▶ Increases in age groups (largely due to oil boom) lessening the “graying of ND”
- ▶ # of older adults in ND is expected to increase 50%.*



Total babies born by single and multiple births

North Dakota, 1990-2011

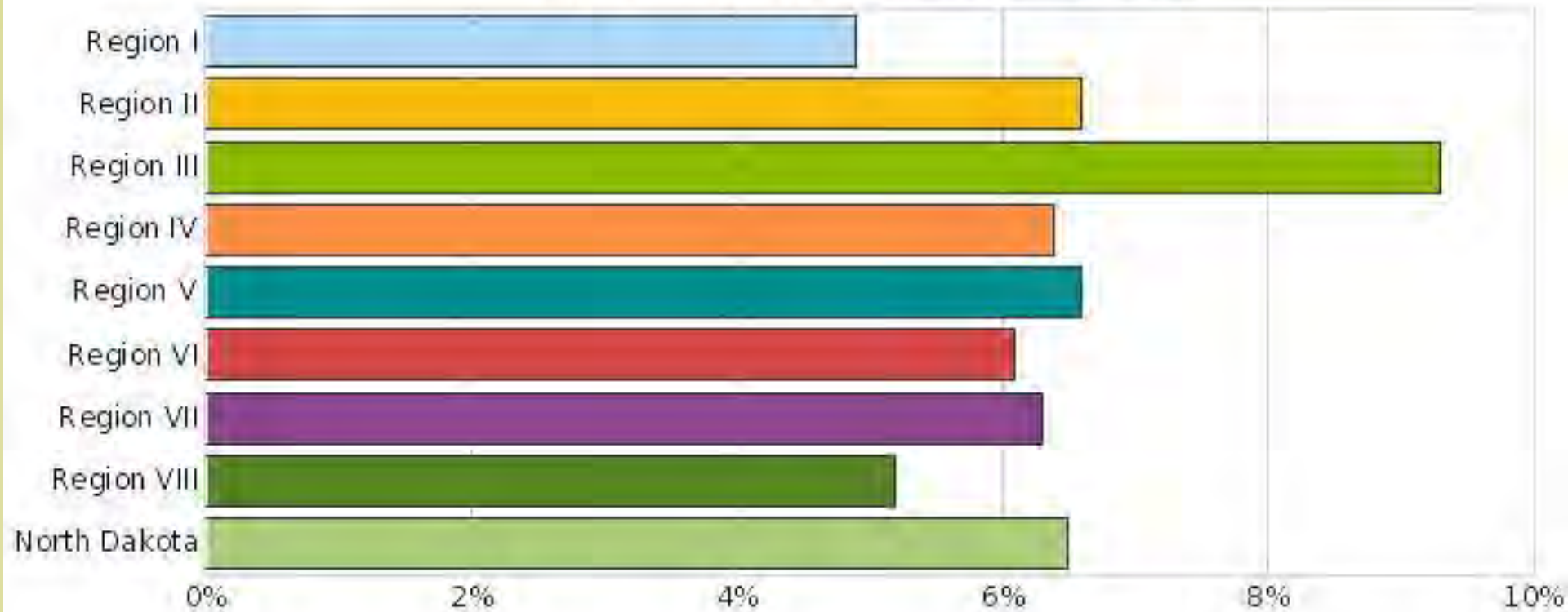


of births reached 9,234 in 2011, up from low of 7,635 in 1999.

Births >>

Babies born at low birth weight (all births)

By planning region, North Dakota, 2011

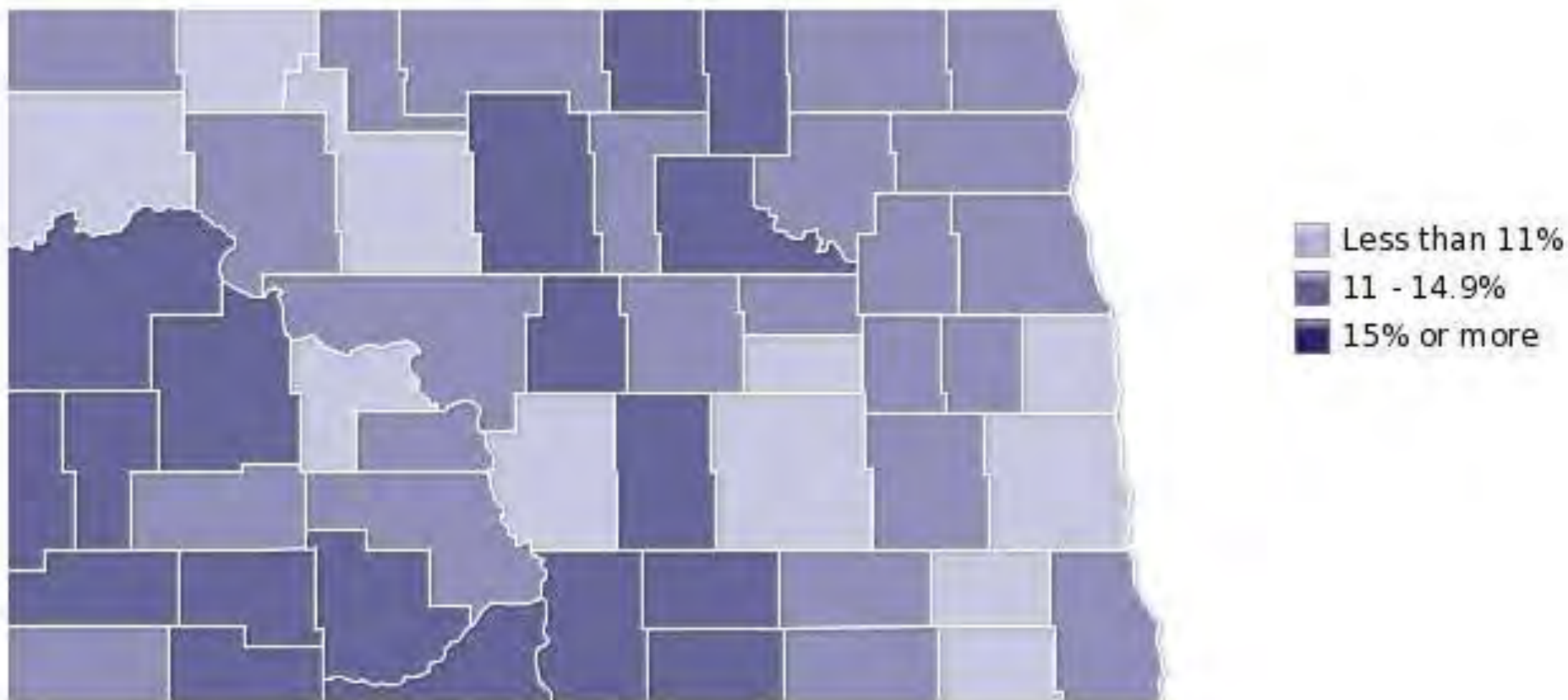


Low Birth Weight by Planning Region >>

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

Residents under age 65 without health insurance

By county, North Dakota, 2010

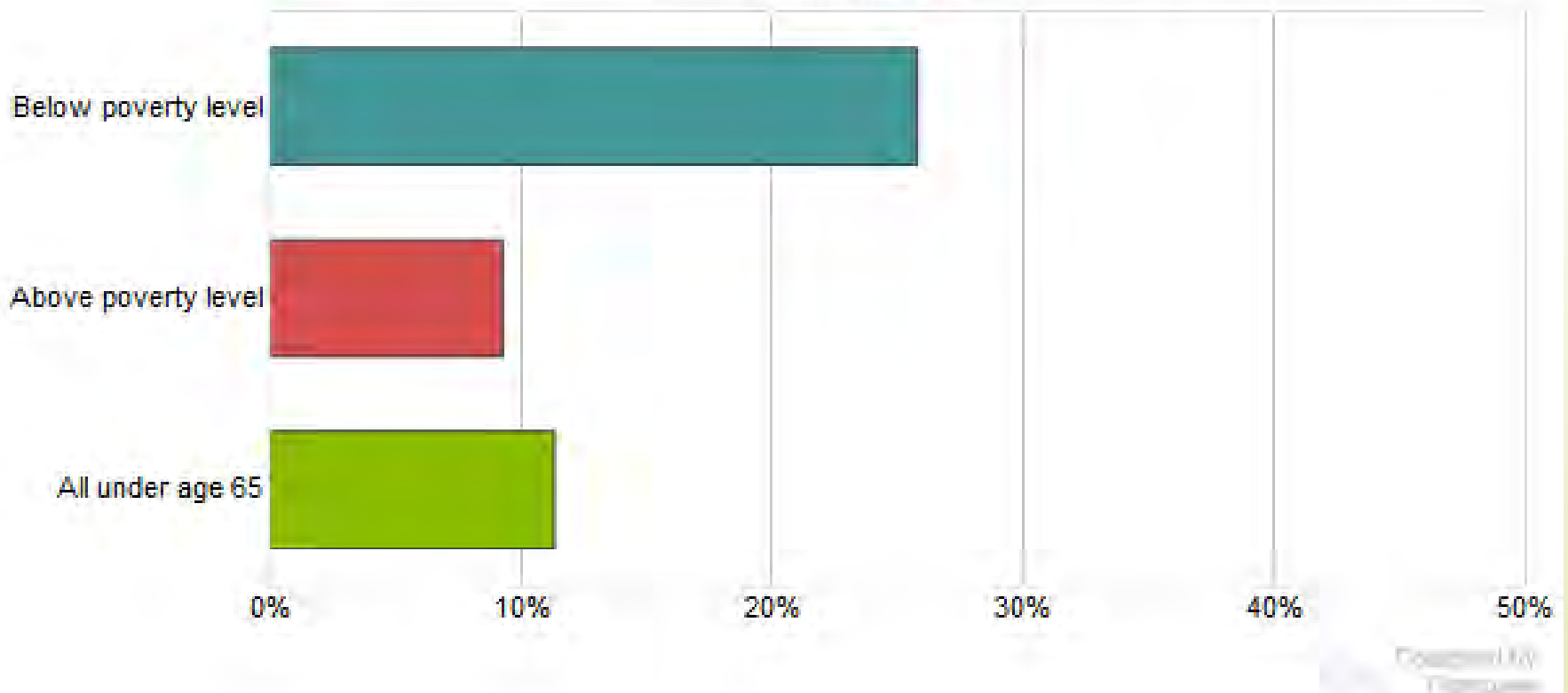


Uninsured by County (Under 65) >>

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 poverty status

North Dakota, 2011

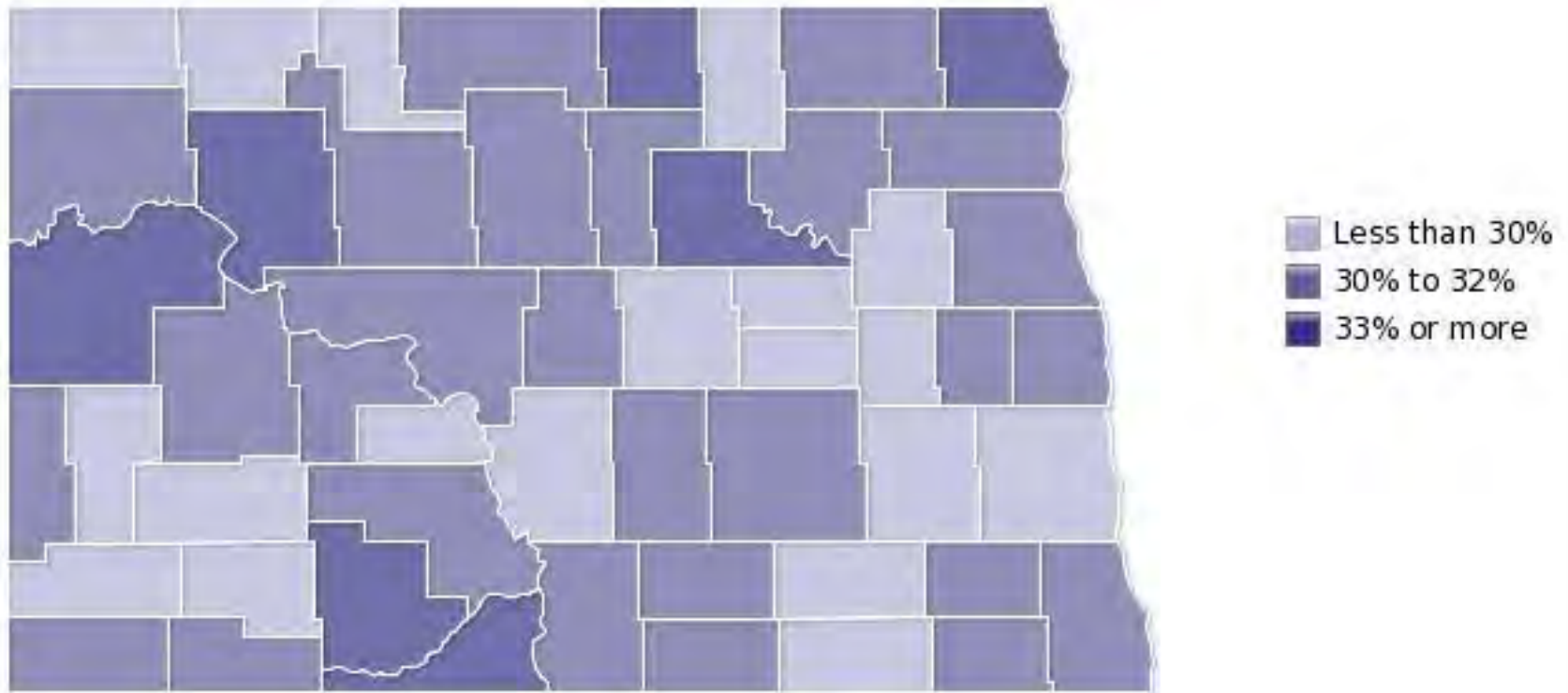


Uninsured by Poverty Status (Under 65) >>

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

Percentage of adults (20+) who are obese

North Dakota counties, 2009



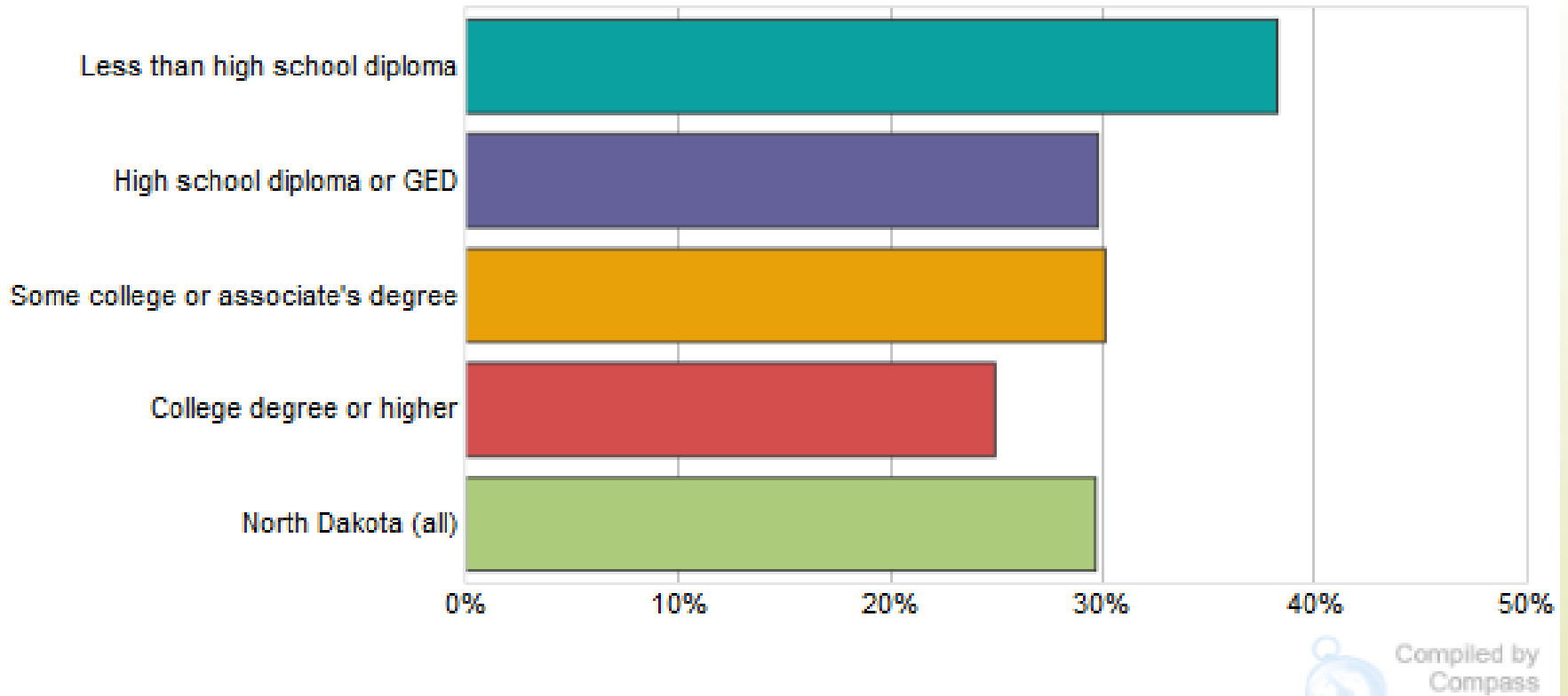
Obesity by County »»

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 educational attainment

North Dakota, 2012



Obesity by Educational Attainment >>

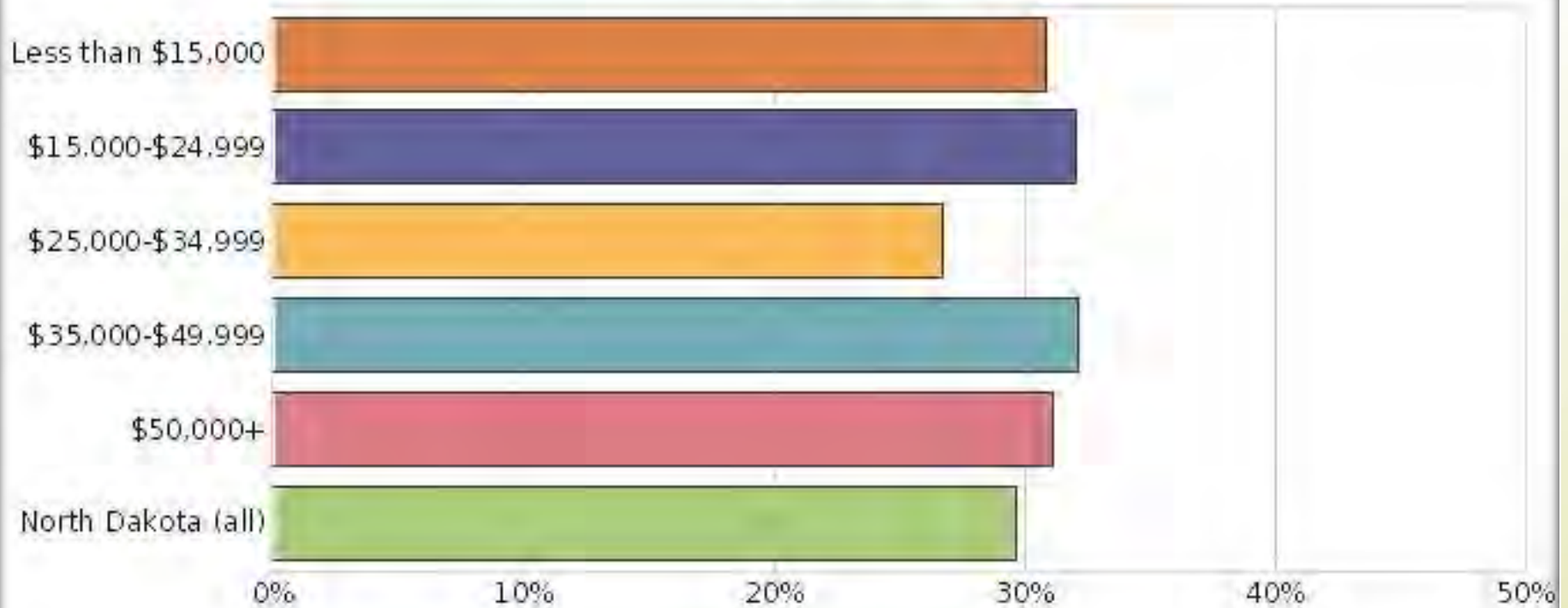
(Note, on website, graphs are dynamic and MOEs are provided where available.)

30% of North Dakotans are considered OBESE.

Rates higher with lower education levels.

Adults who are obese by annual household income

North Dakota, 2012

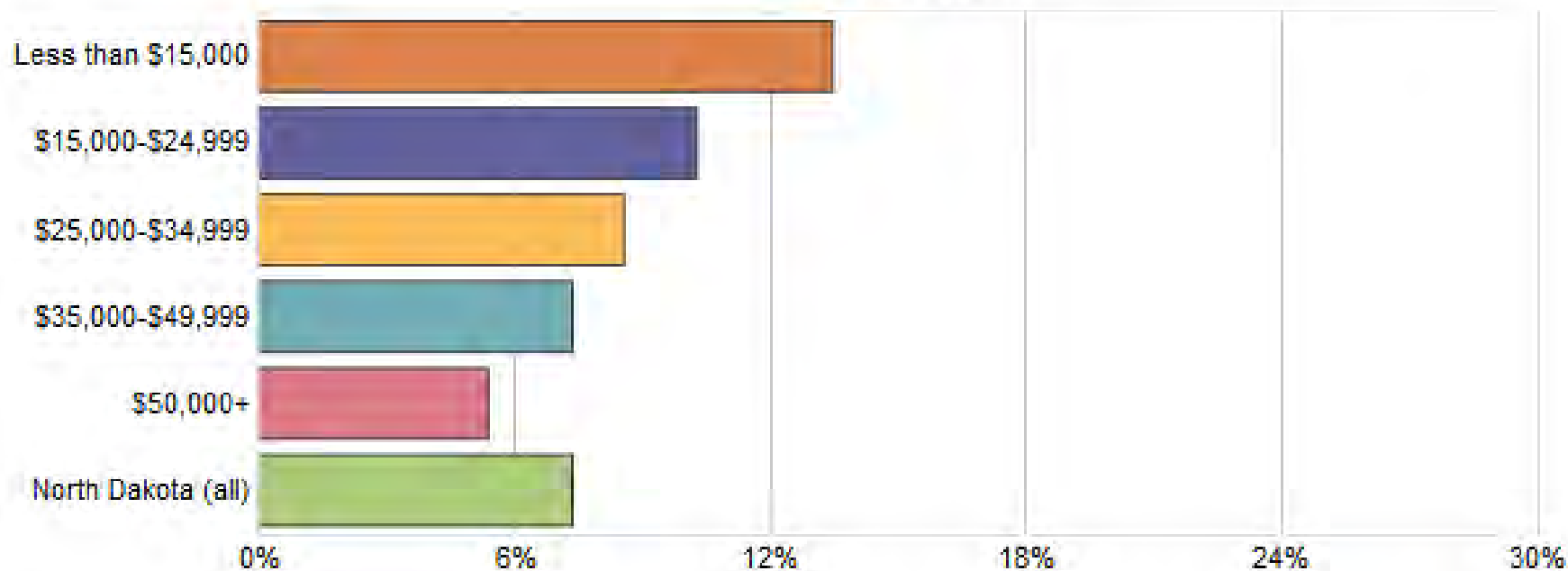


Obesity by Income >>

Obesity rates are high across all income groups.

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

North Dakota, 2010



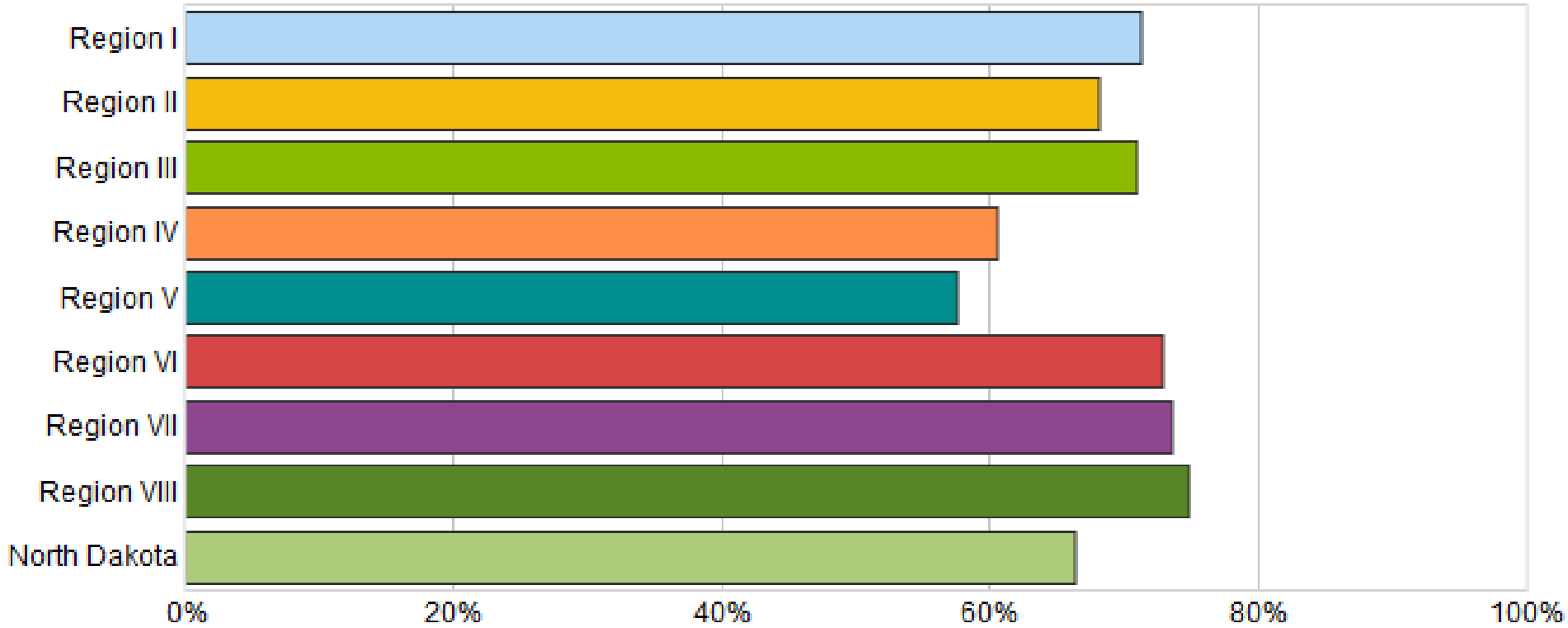
Compiled by
Vigortech

Diabetes by Income >>

Much higher prevalence among lower income groups.

Homeownership rate

By planning region, North Dakota, 2007-2011

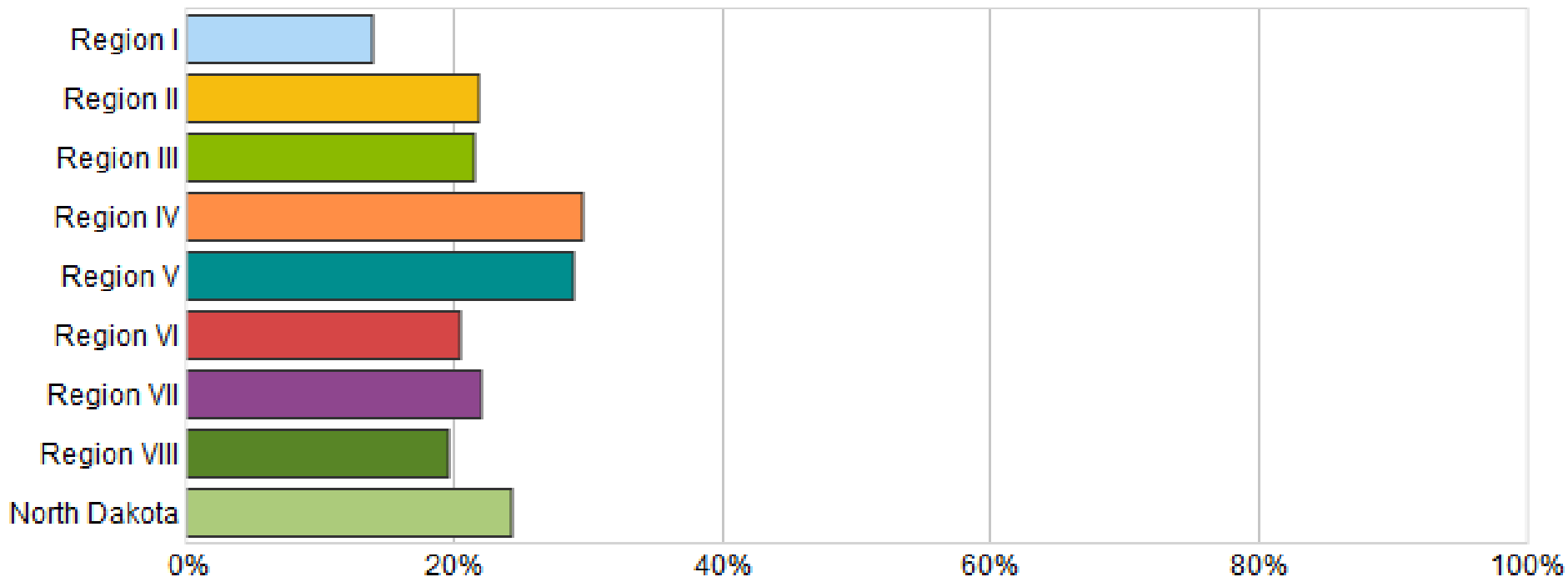


Compiled by
Compass

- ▶ 1 in 3 households owns their home (67%)
- ▶ Rates are as low as 58% in Region V

Share of households paying 30% or more of their income for housing

By planning region, North Dakota, 2007-2011



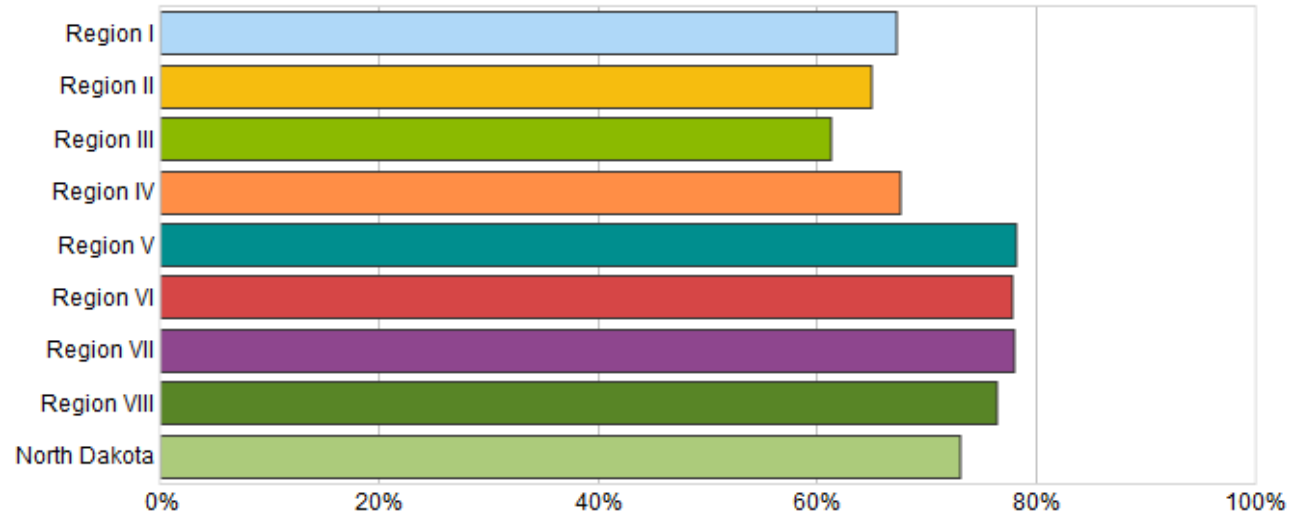
Compiled by
Compass

- ▶ 1 in 4 households is cost-burdened (24%)
- ▶ Burden varies across state = as high as 30% in Region IV

High proportions of workers across the state (including women with young children – among the highest rates in the country at 74%; US average is 65%)

Young children for whom all parents are working

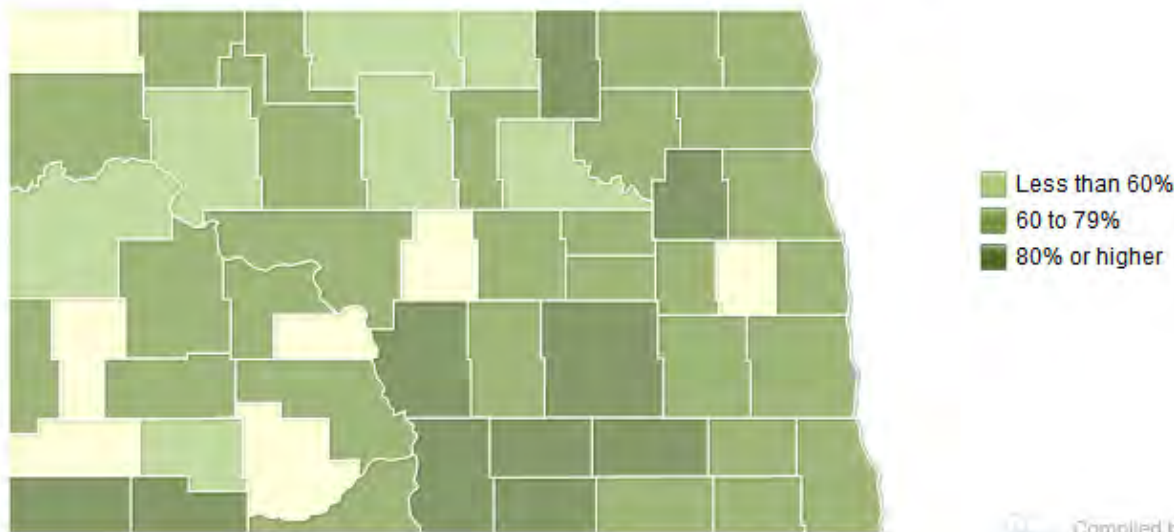
By North Dakota planning regions, 2007-2011



Compiled by Compass

Young children for whom all parents are working

North Dakota counties, 2007-2011



Compiled by Compass

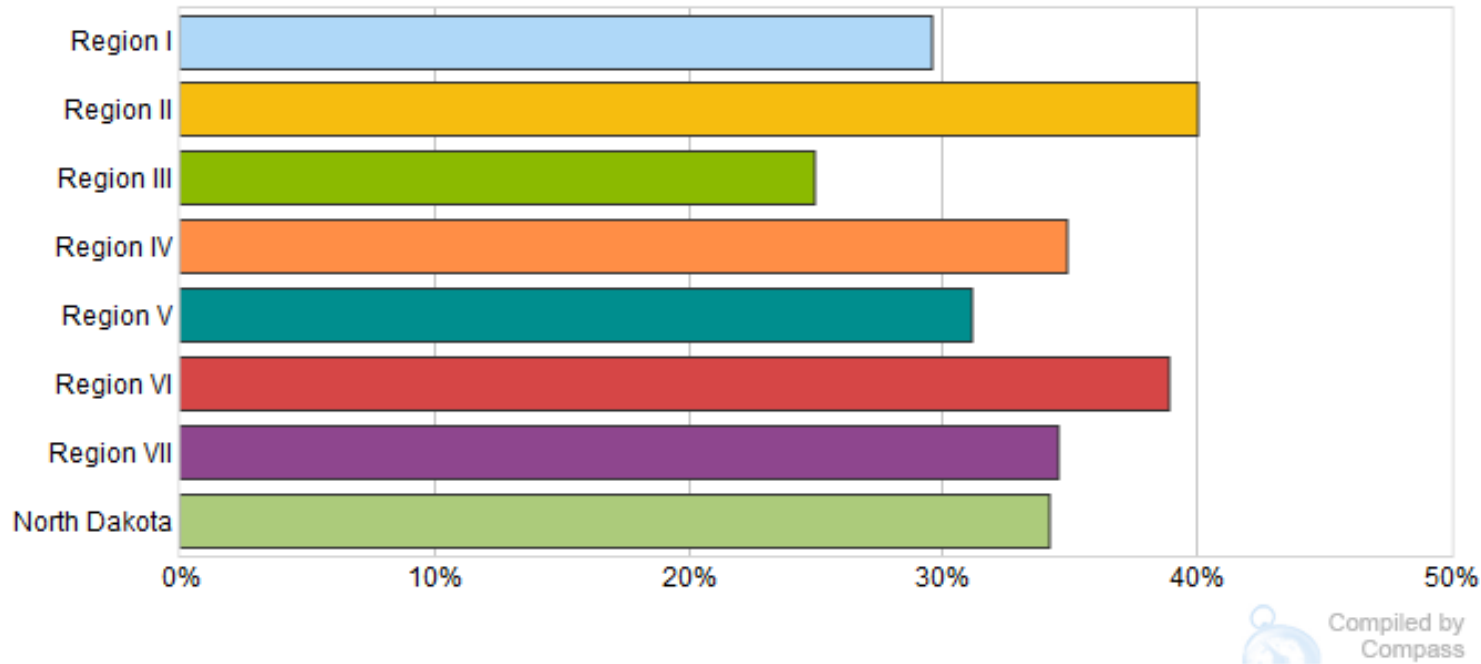
Annual Cost of Licensed Child Care²

<u>Age of Child</u>	Family and Group		Center	
	<u>Average</u>	<u>Highest Rate</u>	<u>Average</u>	<u>Highest Rate</u>
Ages 0 to 17 months	\$6,455	\$16,380	\$8,066	\$15,093
18 to 35 months	\$6,285	\$14,040	\$7,705	\$14,625
Ages 3 to 5	\$6,158	\$11,700	\$7,158	\$13,923

- ▶ Average annual cost of sending an infant to a center-based licensed child care facility in North Dakota in 2012 = \$8,066

Percent of 3 and 4 year olds enrolled in preschool

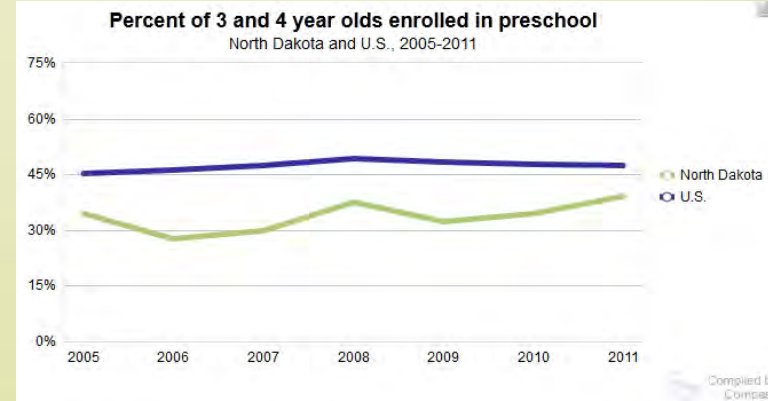
By planning region, North Dakota, 2007-2011



Notes:

The estimates shown here are based on data collected between 2007 and 2011, and therefore they describe the average characteristics for that 5-year time period. A reliable estimate of preschool enrollment was not available for Region VIII over this time period.

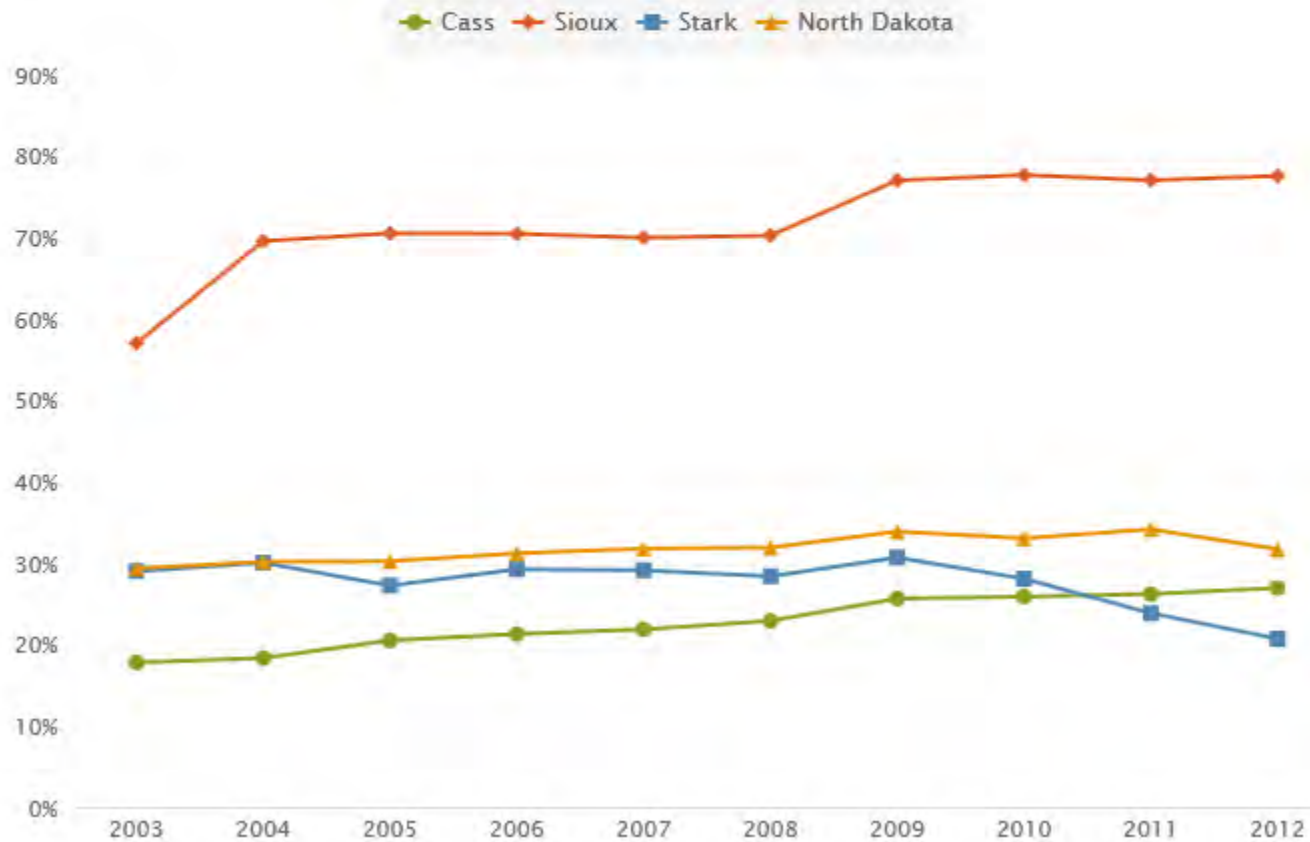
- ▶ % of children in preschool varies widely, but is lower than national average



Children Receiving Free Or Reduced Price Lunch

Year(s): 10 selected | Data Type: Percent

Data Provided by: North Dakota KIDS COUNT

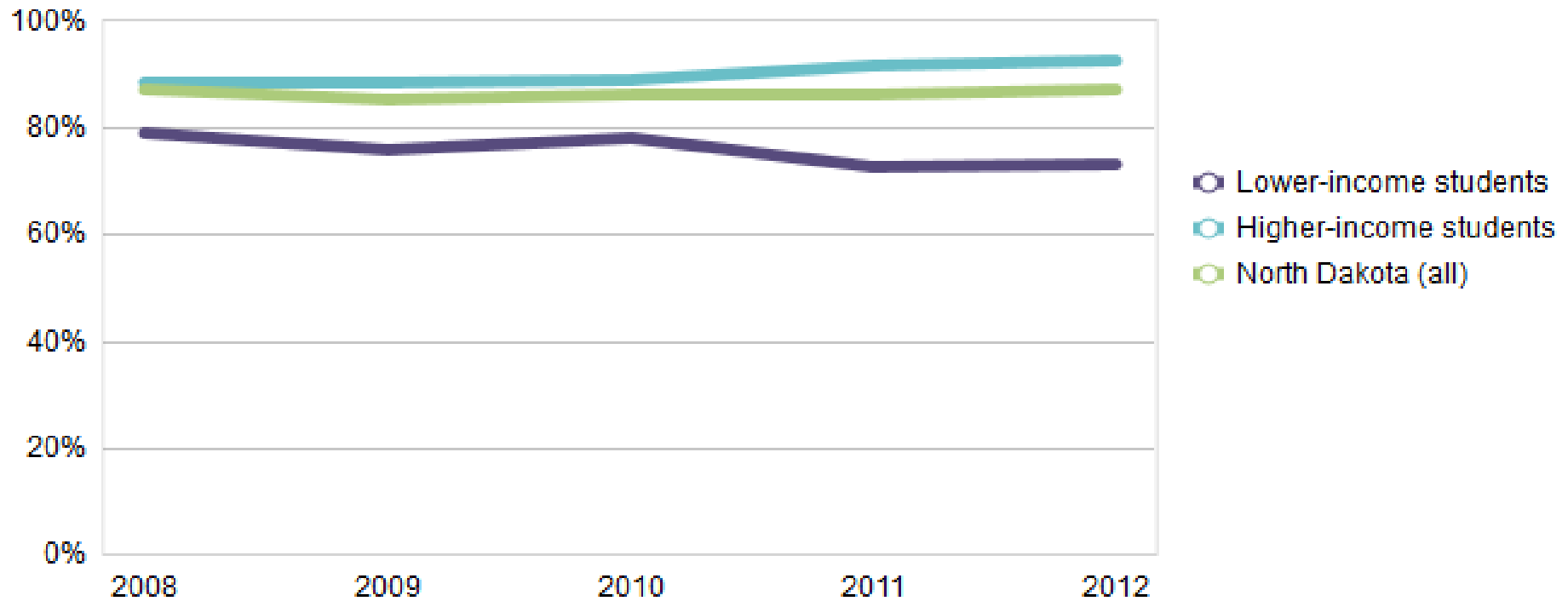


Nearly 1 in 3 ND school children participate in school lunch program (32%). Trend varies across the state; steady growth in Cass County, decline in Stark County, persistent high rates in reservation counties



High school students graduating on time by income

North Dakota, 2008-2012



Compiled by
Compass

Higher-income students graduate on time at higher rate (93%) than lower-income students (73%)

23% of ND high school grads met ACT college benchmark scores in all 4 subject areas in 2012

Test became mandatory for juniors in ND



Location	Category	Data Type	2008	2009	2010	2011	2012
North Dakota	College English	Percent	71.0%	70.0%	71.0%	63.0%	64.0%
	College Math	Percent	48.3%	47.0%	48.0%	43.0%	45.0%
	College Reading	Percent	56.3%	57.0%	56.0%	48.0%	49.0%
	College Science	Percent	30.7%	31.0%	31.0%	26.0%	30.0%
	All Four Subject Areas	Percent	23.7%	24.0%	24.0%	21.0%	23.0%

Exploring county-level data

- »» Lots of resources from ND Compass Key Measures and More Measures

A key data source: U.S. Census Bureau's American Community Survey (ACS)

- ▶ Purpose = measure changing social and economic *characteristics* of the U.S. population.
- ▶ Uses monthly samples to produce annually updated data for small areas (census tracts and block groups) formerly surveyed via decennial census long-form sample.
 - Strength: No longer have to wait 10 years for new data!
- ▶ 5 years of samples are required to produce small-area data.
 - Challenge: Big events are part of a 5-year cumulative sample - mutes big ups/downs, also a bit of a lag
 - Challenge: ACS also produces 3-year and 1-year data products for larger geographic areas; want to compare apples-to-apples
- ▶ The ACS includes people living in both housing units (HUs) and group quarters (GQs).

Resources for county-level data: Census Bureau (currently unavailable)

- ▶ Census Bureau (Pop Estimates, ACS)
 - factfinder2.census.gov

The screenshot displays the American FactFinder interface. At the top, the U.S. Department of Commerce logo and the 'United States Census Bureau' branding are visible. The navigation bar includes 'MAIN', 'COMMUNITY FACTS', 'GUIDED SEARCH', 'ADVANCED SEARCH', and 'DOWNLOAD OPTIONS'. A search instruction reads: 'Search - Use the options on the left (topics, geographies, ...) to narrow your search results'. On the left sidebar, under 'Search using the options below:', there are buttons for 'Topics', 'Geographies', 'Race and Ethnic Groups', 'Industry Codes', and 'EEO Occupation Codes'. A red arrow points to the 'Geographies' button. The 'Select Geographies' modal window is open, showing a table with columns 'List', 'Name', 'Address', and 'Map'. Below the table, there are radio buttons for 'most requested geographic types' (selected) and 'all geographic types'. A dropdown menu is open, listing various geographic types with their corresponding codes. A red arrow points to the 'Metropolitan Statistical Area/Micropolitan Statistical Area - 310' option, which is highlighted in blue.

U.S. Department of Commerce
United States Census Bureau

AMERICAN FactFinder

MAIN COMMUNITY FACTS GUIDED SEARCH **ADVANCED SEARCH** DOWNLOAD OPTIONS

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections
'Your Selections' is empty

To search for tables and other files in American FactFinder:

Select Geographies

List	Name	Address	Map
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Select geographies to add to Your Selections

Select from: most requested geographic types all geographic types

Select a geographic type:

- select a geographic type --
- Consolidated City - 170
- Place within Consolidated City (or part) - 172
- Congressional District - 500
- School District (Elementary)/Remainder - 950
- School District (Secondary)/Remainder - 960
- School District (Unified)/Remainder - 970
- Metropolitan Statistical Area/Micropolitan Statistical Area (or part) - 320
- Principal City (or part) - 321
- Area Outside of Metropolitan Statistical Area/Micropolitan Statistical Area (or part) - E32
- Combined Statistical Area (or part) - 340
- New England City and Town Area (or part) - 360
- 5-Digit ZIP Code Tabulation Area - 860
- 5-Digit ZIP Code - 861
- Commodity Flow Survey Area/Remainder - E53
- American Indian Area/Alaska Native Area/Other Home Land - 250
- Metropolitan Statistical Area/Micropolitan Statistical Area - 310**
- State (or part) - 311
- Principal City (or part) - 312
- Combined Statistical Area - 330
- Urban Area - 400

Resources for county-level data: KIDS COUNT

▶ KIDS COUNT

- datacenter.kidscount.org

- ▶ www.ndkidscount.org/data.html –
-> 2013 *Fact Book* just released

The screenshot shows the homepage of the KIDS COUNT data center. At the top, there is a navigation menu with links for DATA BY LOCATION, DATA BY TOPIC, PUBLICATIONS, and UPDATES. Below the menu is a search bar with the placeholder text "Enter any location, topic, and/or keyword's here" and a "SEARCH DATA CENTER" button. A map of the United States is displayed, with state abbreviations labeled. A button labeled "VIEW U.S. DATA" is located at the bottom right of the map area. The page also features a brief description of the data center's mission and a list of navigation options.

This screenshot shows a section of the KIDS COUNT Data Center website. It features a navigation menu at the top with links for HOME, PRESENTATIONS, TOPICS, RESOURCES, and CONTACT US. The main content area is titled "Get National, State, and County Data" and includes a list of links for viewing data for North Dakota, comparing North Dakota to other states, and viewing data for all 53 counties. Below this is a section titled "KIDS COUNT Data Center" with a red arrow pointing to a paragraph of text. The text describes the data center's mission and the availability of data for various locations and topics. A "Learn More" button is located below the text. At the bottom of the page, there is a small image of a child and the text "KIDS COUNT Data Book 2013".

Resources for county-level data: County Health Rankings

▶ County Health Rankings

➤ <http://www.countyhealthrankings.org/>

County Health Rankings & Roadmaps
A Healthier Nation, County by County

Search this site

Robert Wood Johnson Foundation

Rankings Roadmaps ABOUT CONTACT FAQs BLOG WEBINARS TOOLS & RESOURCES

FIND YOUR COUNTY Learn About Data & Methods Download Rankings Data

Find Health Rankings for Your State and County

North Dakota

Look up your county's *Rankings*, learn about our methods, and download the data you need.

- Learn about the Data & Methods**
Find out what is measured and how the *Rankings* add up.
- Download the Rankings Data**
You can download the *Rankings* data for your state or the entire nation.

Explore Rankings Data

Additional resources for county-level data

- ▶ ChildCare Aware of ND (formerly CCR&R)

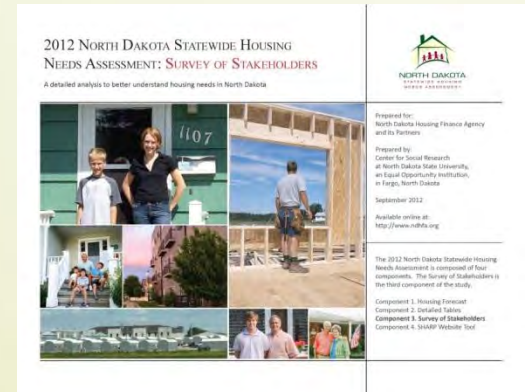
- <http://www.ndchildcare.org/data-pub/>

- ▶ 2012 ND Housing Needs Assessment

- <http://www.ndhfa.org/Default.asp?nMenu=01450>

- ▶ Sources of data while government resources are shutdown:

- <http://mcdc.missouri.edu/>
 - <https://www.nhgis.org/>
 - <http://www.ipums.org/>



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