



North Dakota Legislative Leadership Institute on Child
Development Research and Policy, Bismarck, ND
September 12-14, 2011

THE WELL-BEING OF NORTH DAKOTA'S INFANTS AND TODDLERS

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Setting the Stage

- According to Frameworks Institute research:
 - Early childhood development is a foundation for community development and economic development
 - The brain's basic architecture begins before birth and continues into adulthood
 - Learning, behavior, and physical and mental health are interrelated over the life course
 - Toxic stress damages the developing brain and leads to problems in learning, behavior, and increased susceptibility to physical and mental illness over time

Examples of Data Sources

- Federal Sources:
 - U.S. Census Bureau, American Community Survey
 - National Survey of Children's Health
 - Head Start Program Information Reports
- State Sources:
 - Departments of Health, Human Services, Transportation
- Organizations:
 - National KIDS COUNT, North Dakota KIDS COUNT
 - National Center for Children in Poverty

Painting a Picture



Dimensions of Infant and Toddler Well-Being

- General Statewide Context
- Mothers and Infants
- Economic Well-Being
- Health and Development
- Child Welfare
- Early Care and Education

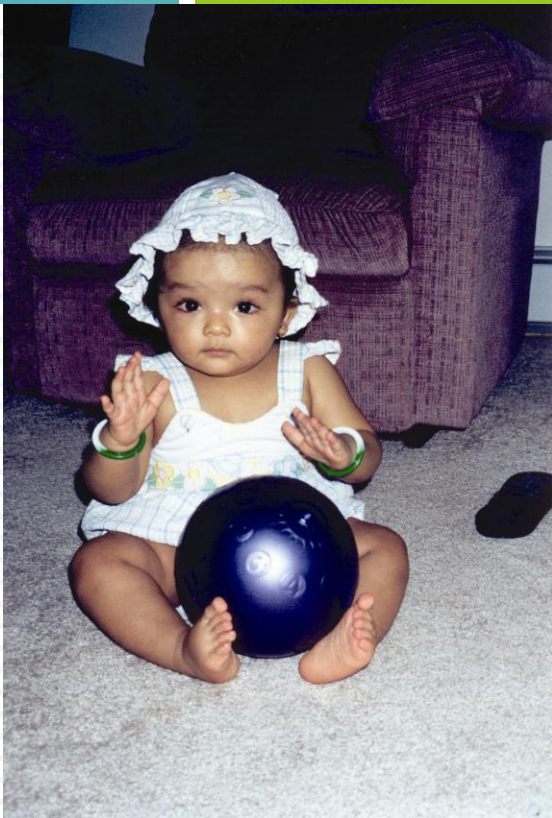
- *Focus on American Indian children*
- *Focus on Western ND*

Overall Well-Being

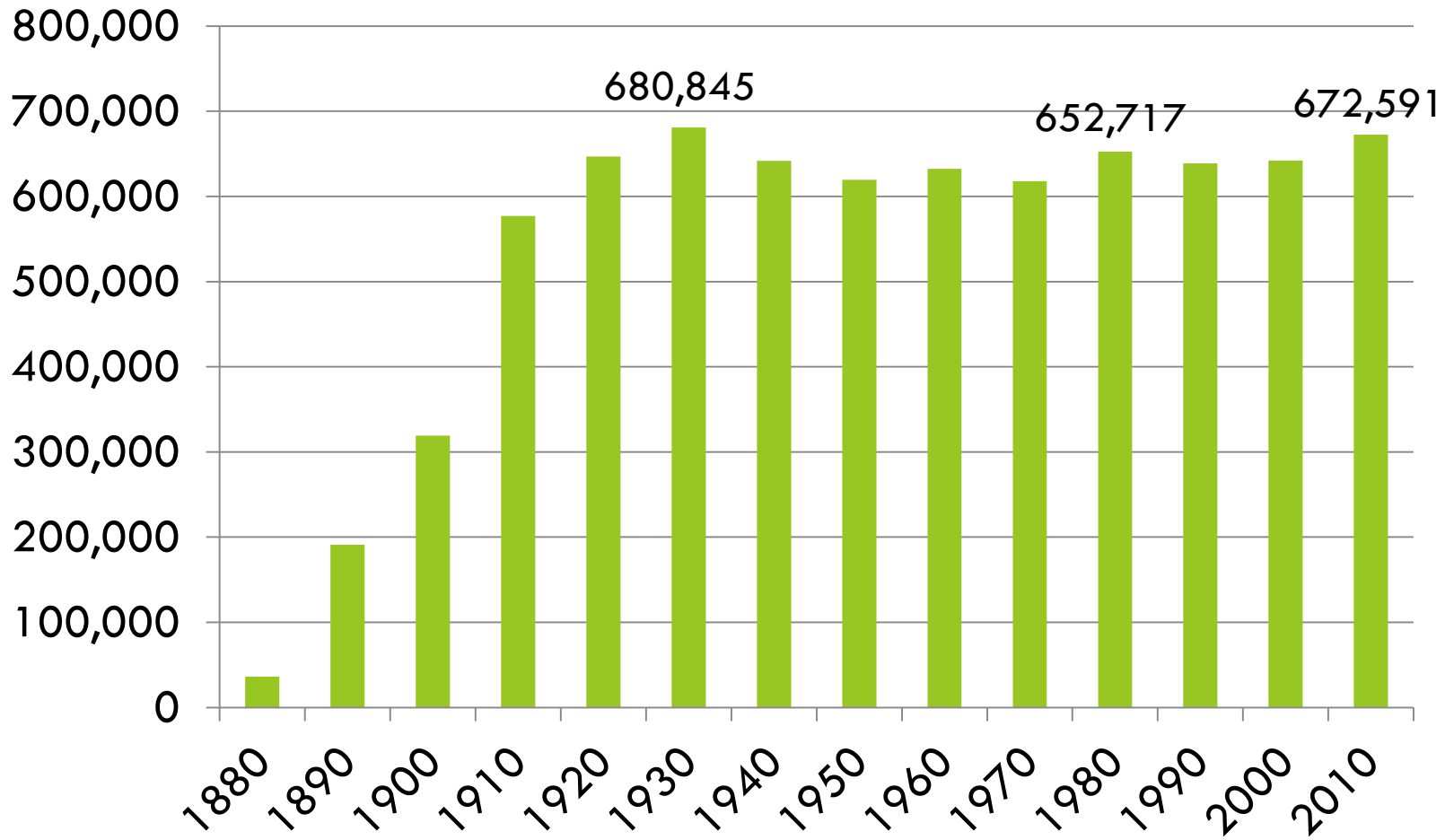
- North Dakota ranks 10th overall, according to 2011 KIDS COUNT Data Book
 - Strengths: low birth weight babies, secure parental employment, single-parent families
 - Challenges: teen death rate, child death rate, infant mortality rate
- However, ND ranked 47th in *making improvements* in our children's well-being



General Statewide Context

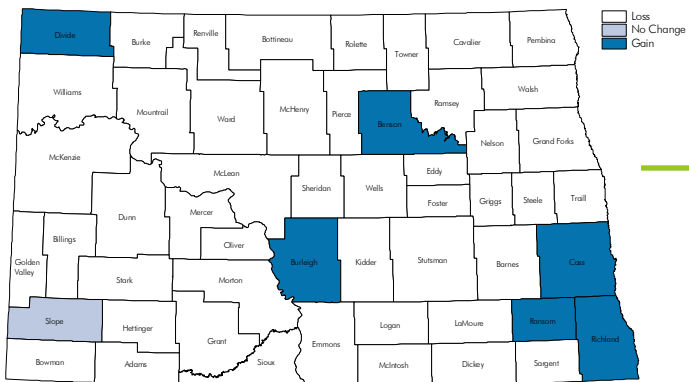


ND Population 1980-2010

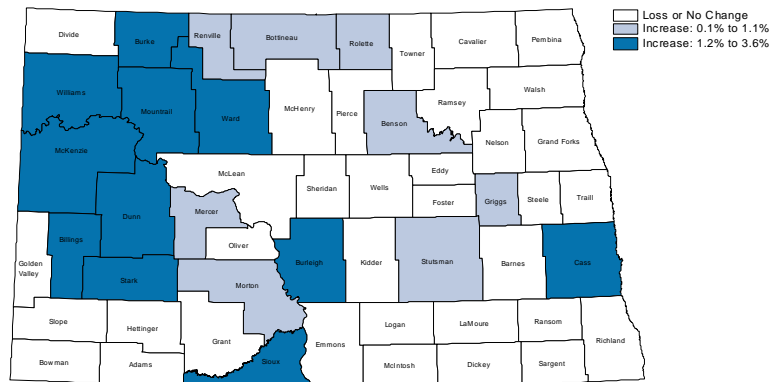


Percent Change in Total ND Population

2002 to 2003

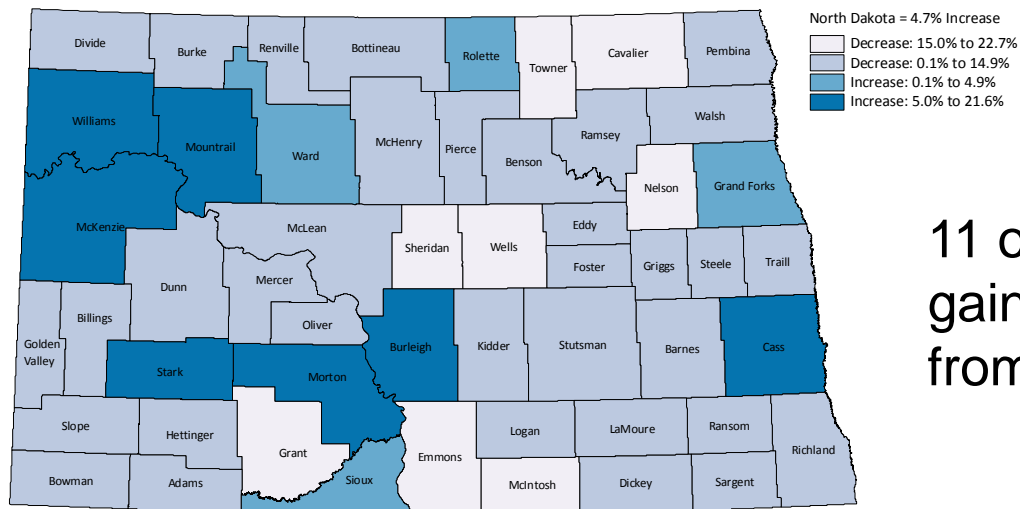


2008 to 2009



Percent Change in Total Population in North Dakota by County: 2000 to 2010
 Source: U.S. Census Bureau, Decennial Censuses

2000 to 2010



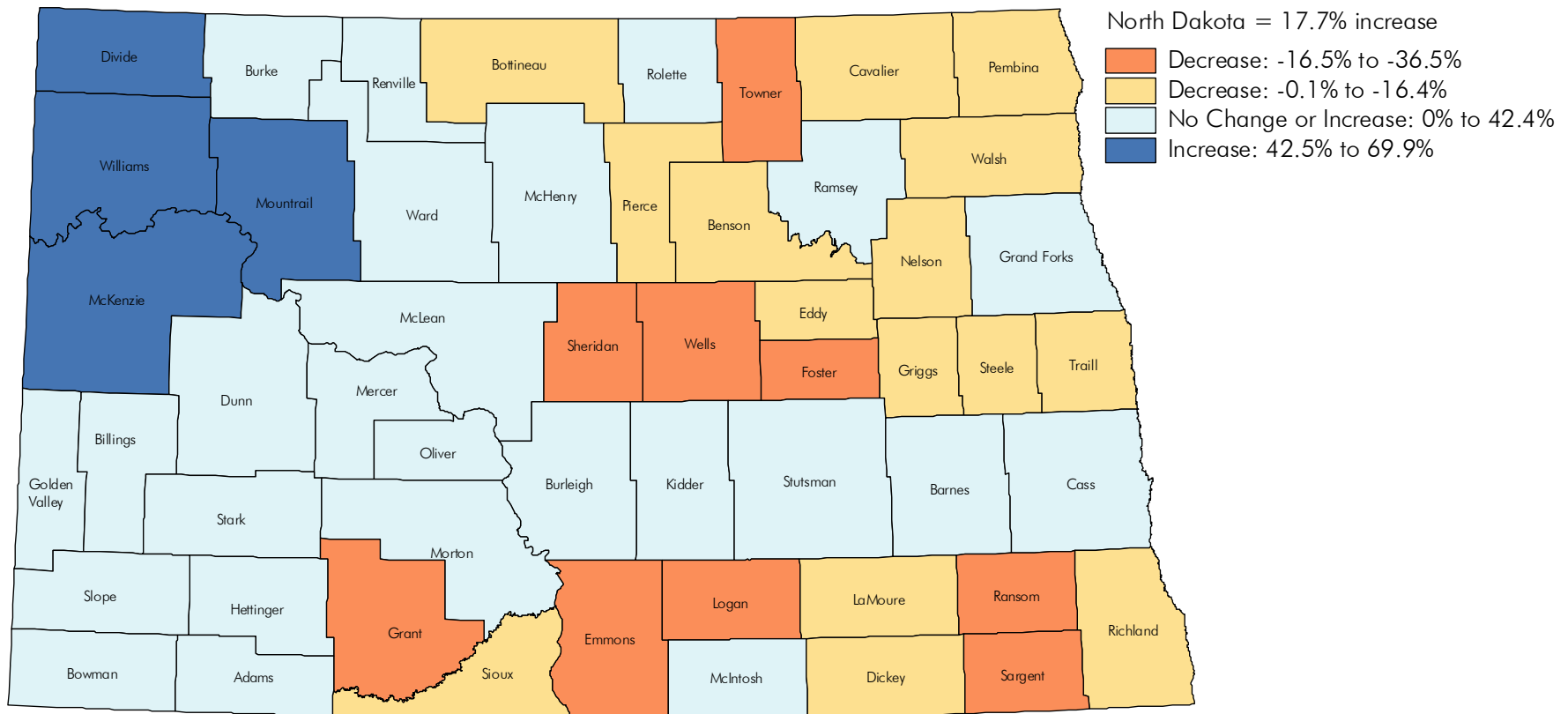
11 of 53 counties gained population from 2000 to 2010

North Dakota = 4.7% Increase

Percent Change in Young Adults Ages 25 to 34 in ND

Percent Change in the Population of Persons Ages 25 to 34 in North Dakota by County: 2000 to 2010

Source: U.S. Census Bureau, 2000 and 2010 Census



Racial Distribution (1 + races)

- American Indians are North Dakota's largest minority group, and growing
- Changing racial distribution, from 1980 to 2010:
 - White – decreased from 96% to 92%
 - American Indian – increased from 3% to 6%
- Children younger than 18:
 - 21% of all Whites in the state
 - 38% of all American Indians in the state



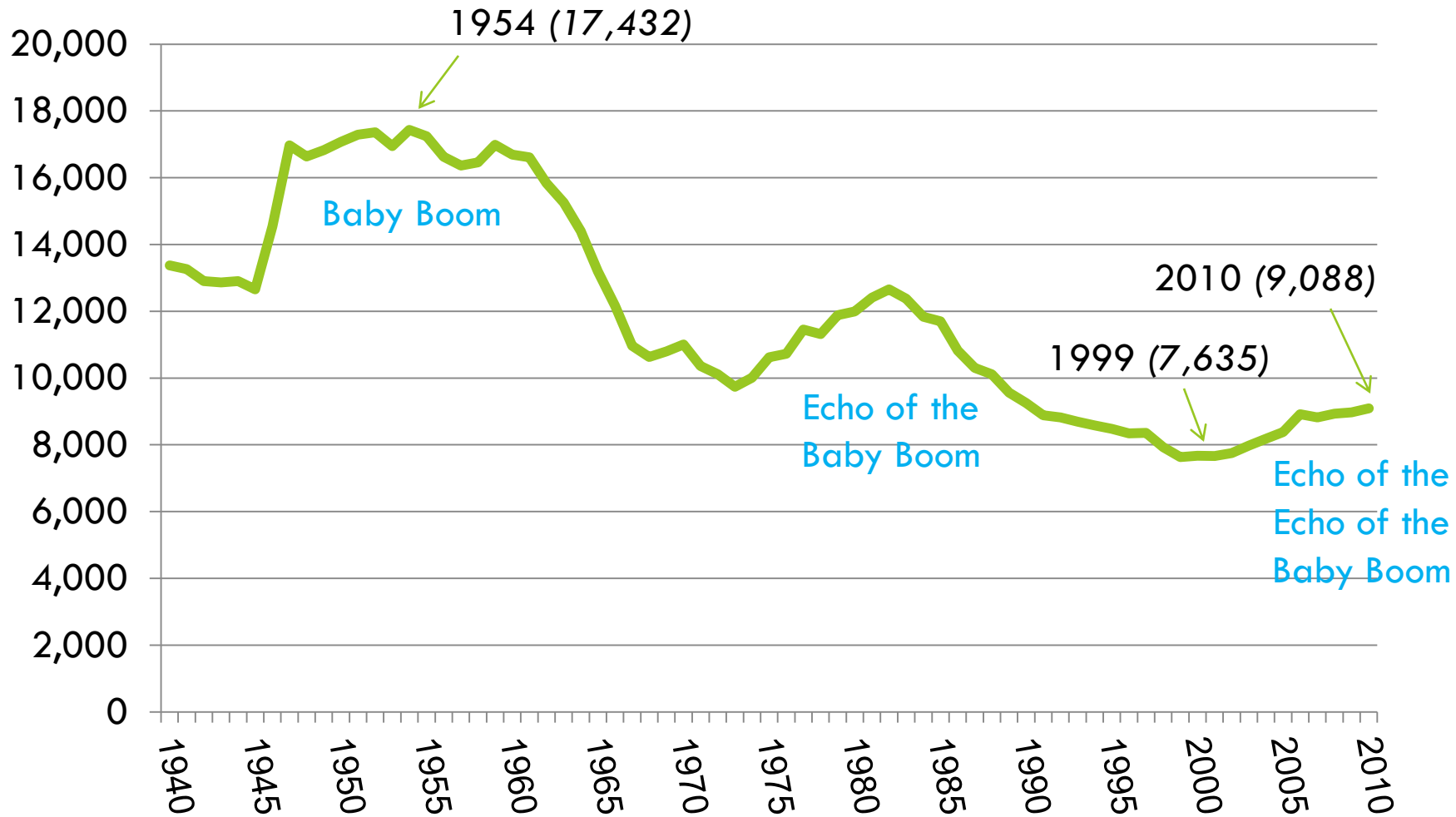
American Indian Reservations in ND

55% of American Indians were living on one of the state's 4 reservations in 2010



1. Turtle Mountain
2. Fort Berthold/Three Affiliated Tribes
3. Spirit Lake
4. Standing Rock
5. Lake Traverse
6. Trenton Indian Service Area

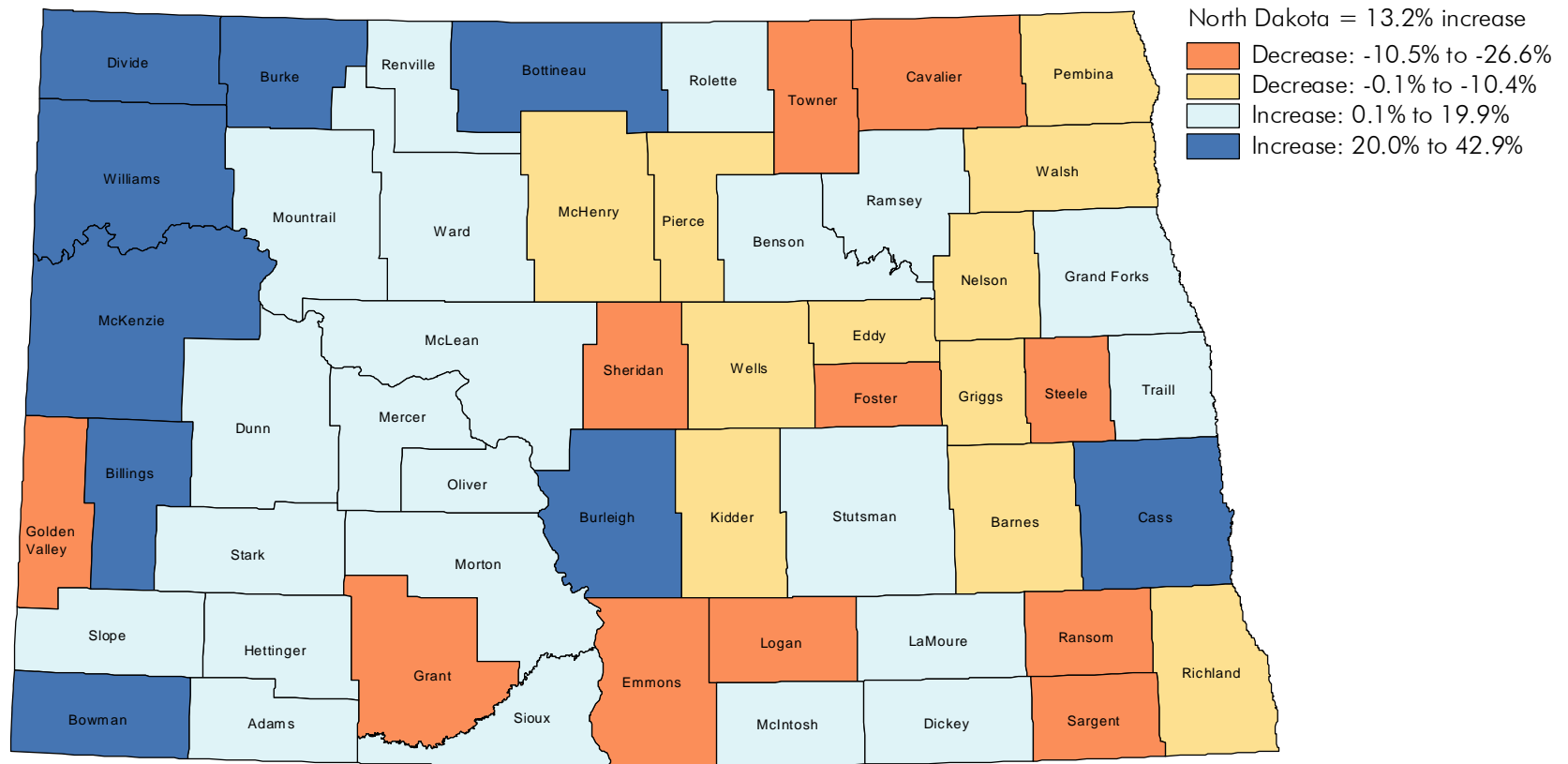
Births to ND Residents: 1940 to 2010



Percent Change in Young Children in ND

Percent Change in the Population of Persons Ages 0 to 4 in North Dakota by County: 2000 to 2010

Source: U.S. Census Bureau, 2000 and 2010 Census



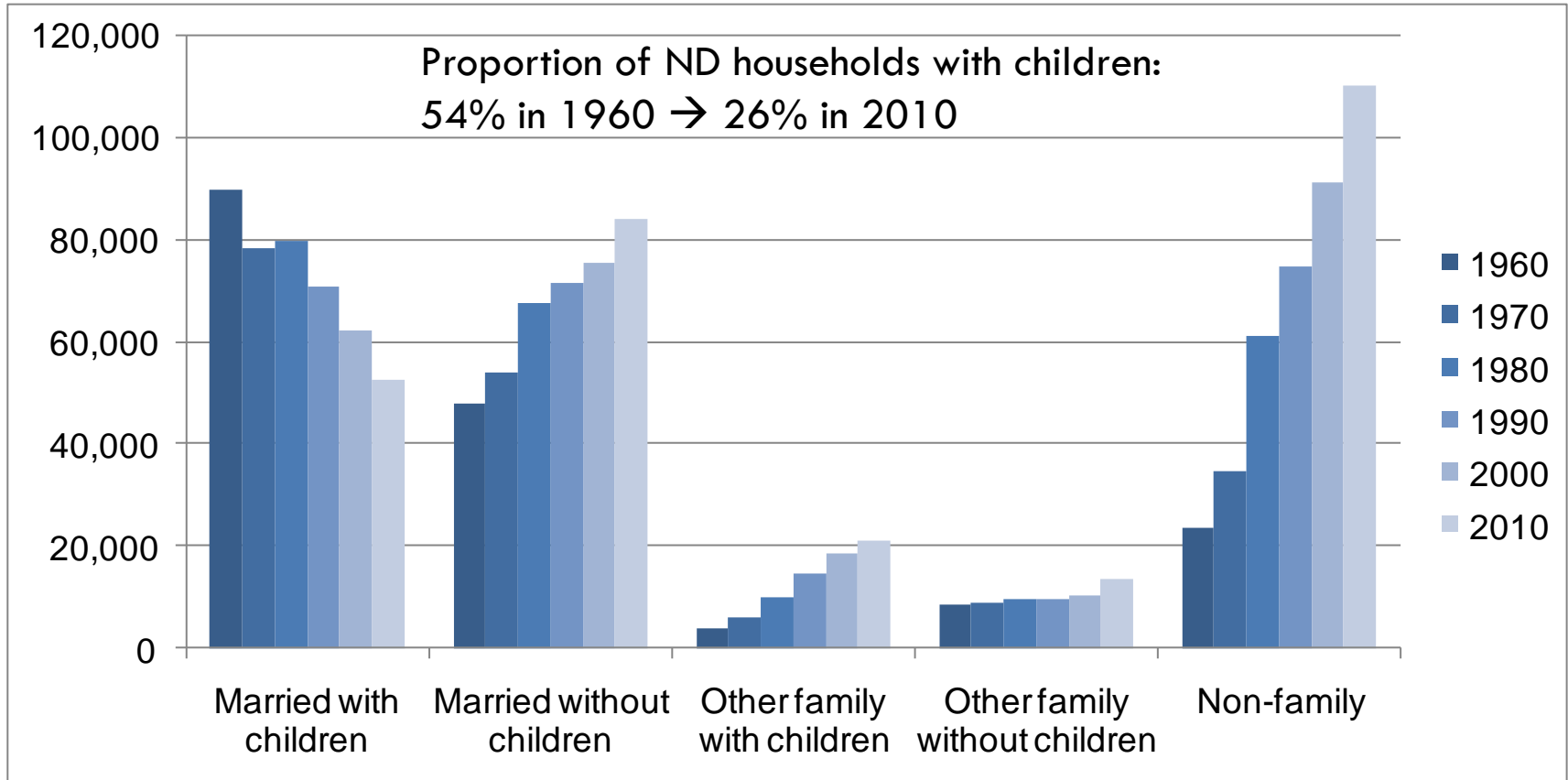
Children Birth Through Age 3 in ND

- 35,923 children 0-3 in 2010 (5.3% of total ND population)
 - 4.8% of all Whites
 - 9.2% of all American Indians
- Race of children 0-3
 - 81.1% White
 - vs. 90.0% of total population
 - 9.3% American Indian/Alaska Native
 - vs. 5.4% of total population
 - 5.6% two or more races
 - vs. 1.8% of total population



Households by Type in North Dakota

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Family Composition in ND

- 71.5% of ND children live in two-parent families
- 21.0% live in single-parent families
- 3.5% live with grandparents



Mothers and Infants



Births to Unmarried Women in ND

“Children born to unmarried mothers are more likely to grow up in a single-parent household, experience instability in living arrangements, live in poverty, and have socio-emotional problems.” – Child Trends

- 1 / 3 of births were to unmarried women in 2009
 - Up from 23% in 1994
- 20% of births to unmarried women in 2009 were to teenagers

Teen Pregnancy in ND

“When teens give birth, their future prospects decline. Teen mothers are less likely to complete high school and more likely to live in poverty than other teens.” – CDC

- 662 births to teens (2009)
 - 7.4% of all live births
 - Teen birth rate = 27.9 per 1,000 girls ages 15 to 19

- The vast majority of teen births were to unmarried teens (89.0%)

Births to Mothers with Inadequate Prenatal Care in ND

“Mothers who do not receive prenatal care are three times more likely to give birth to a low-weight baby, and their baby is five times more likely to die.”
– Child Trends

- 389 births to mothers who did not have adequate prenatal care (2009)
 - 4.3% of all live births

Unplanned Pregnancy in ND

“An unintended pregnancy is associated with an increased risk of morbidity for women, and with health behaviors during pregnancy that are associated with adverse effects.” – CDC

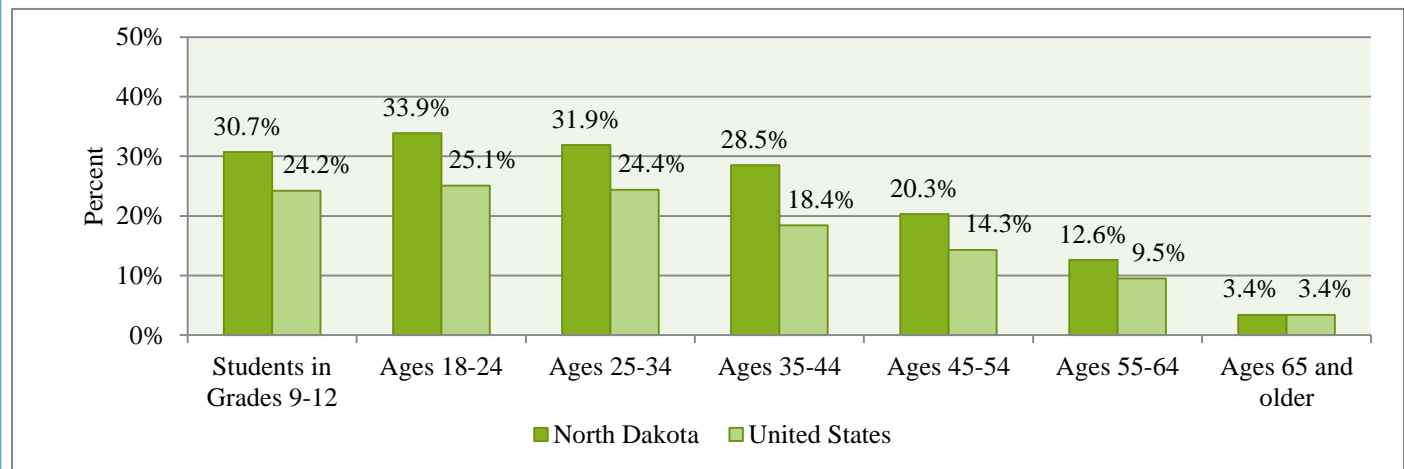
- More than 1 in 3 pregnancies resulting in a live birth were unintended (2002 PRAMS)
 - 30% mistimed
 - 6% unwanted



Maternal Alcohol Use

“To prevent Fetal Alcohol Spectrum Disorders, a woman should not drink alcohol while she is pregnant, or even when she might get pregnant. This is because a woman could get pregnant and not know for several weeks or more.” - CDC

- Only about 1% of ND mothers indicated they drank during their pregnancy in 2010 (106 births)
- ~Binge drinking rates are highest among age groups most likely to be having children



Breastfeeding in ND

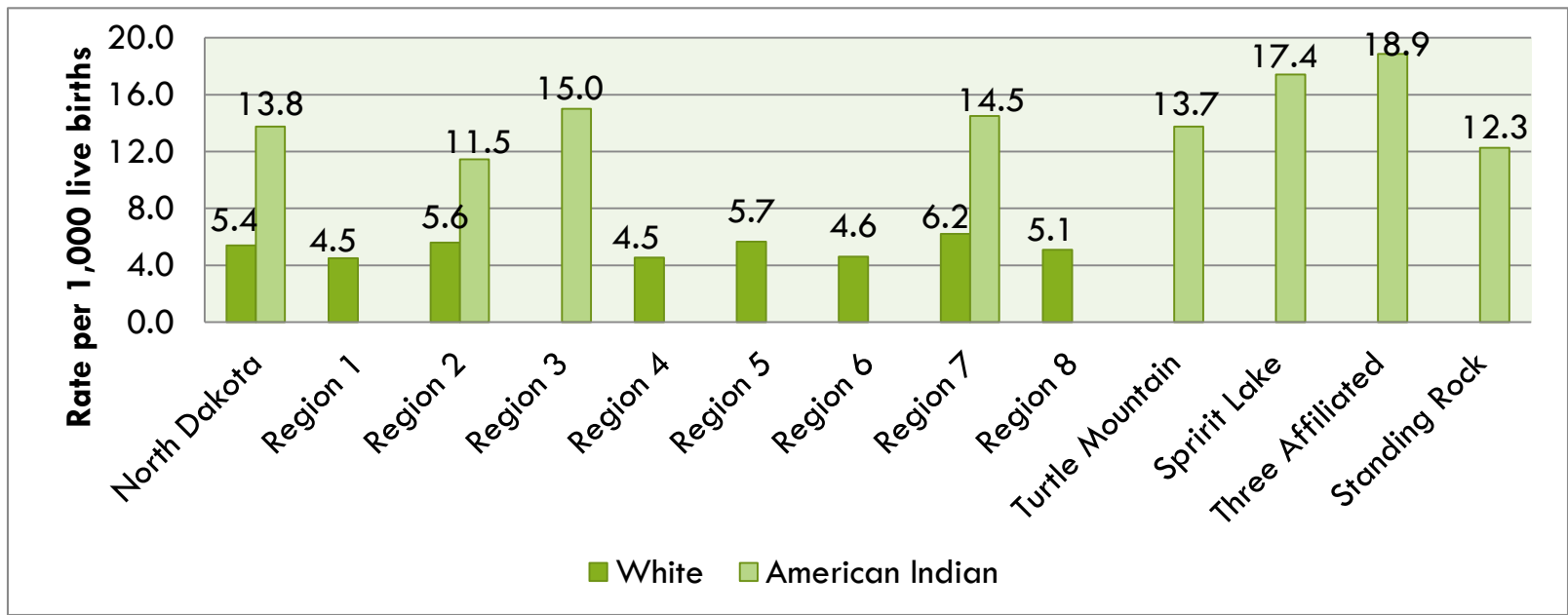
“The American Academy of Pediatrics recommends that healthy babies only be given breast milk for about the first six months of life. When babies are fed formula, their risks are higher for obesity and other illnesses.”
– CDC

- 41% of mothers were breastfeeding their infants at six months of age in 2007
 - 20% of children in WIC in 2010 were breastfed at least 6 months
- 26% of children were not breastfed for any period of time

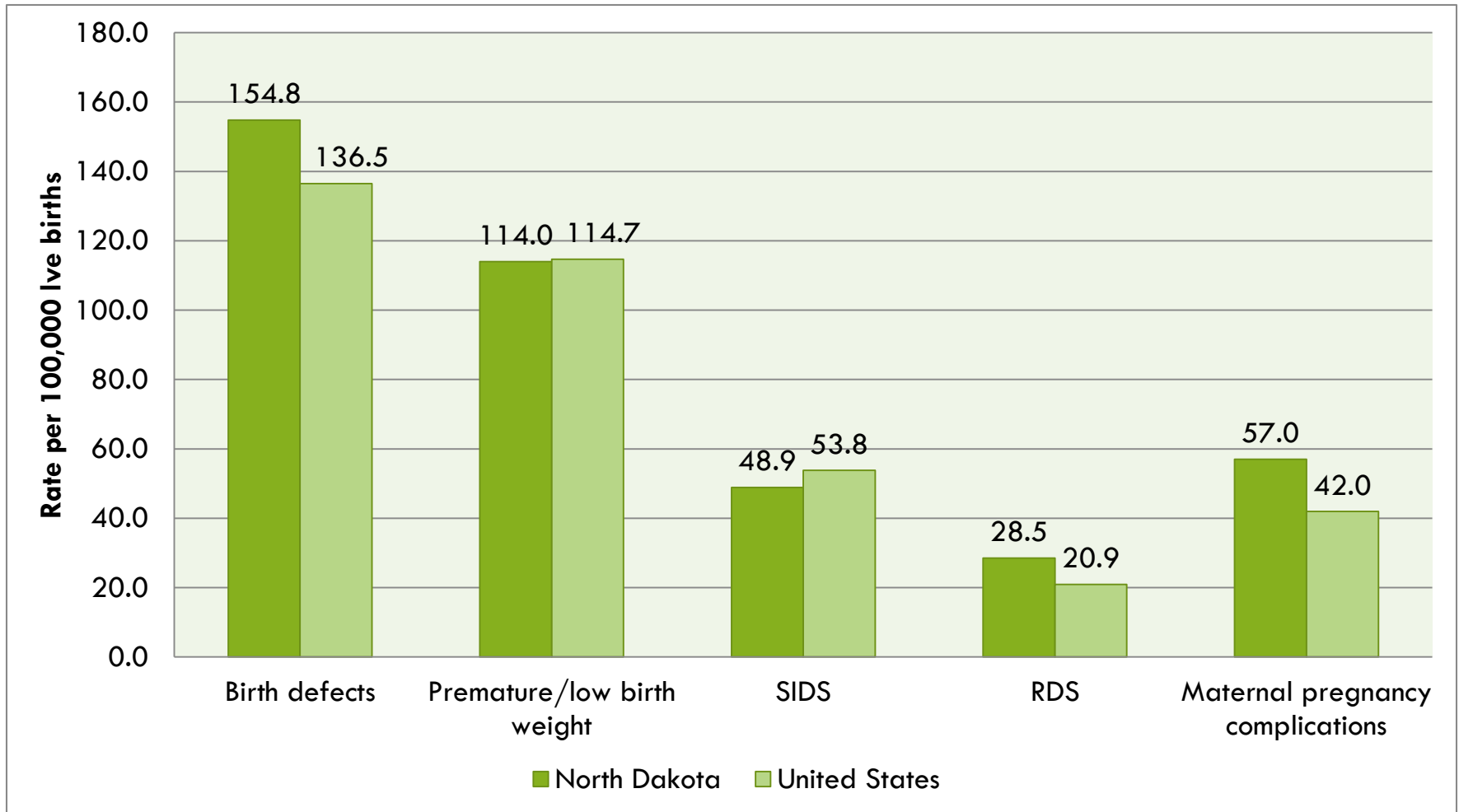


Infant Mortality in ND

- Deaths to infants less than 1 year of age:
 - 55 babies died in 2009 (0.6% of all births)
 - 6.2 deaths per 1,000 live births from 2005-2009
 - 13.8 American Indian children
 - 5.4 White children

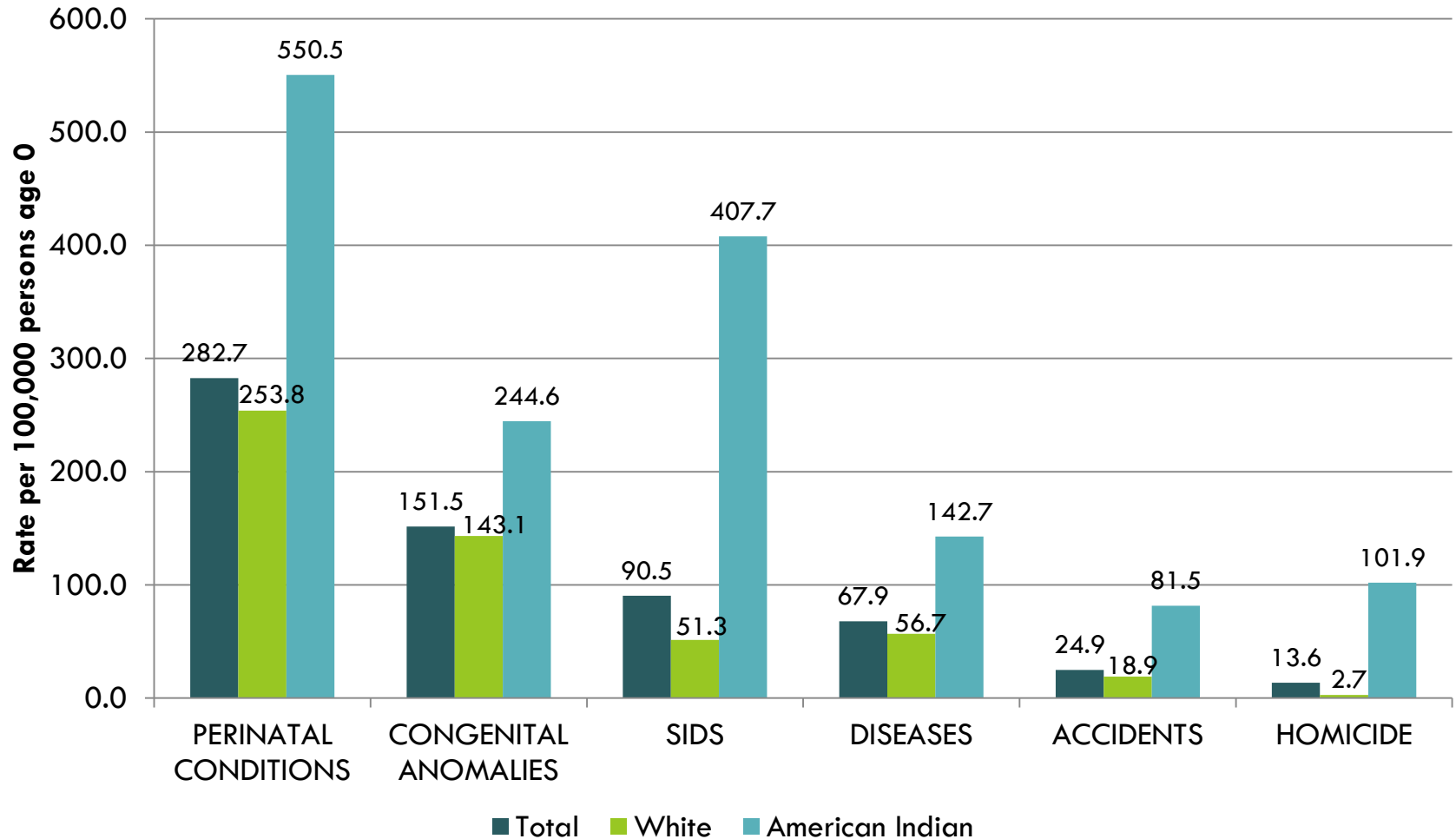


Health-Related Causes of Death for Infants, 2003-2005



Note: SIDS stands for sudden infant death syndrome and RDS stands for infant respiratory distress syndrome.
Source: March of Dimes Foundation using data from the National Center for Health Statistics, 2003-2005

All Causes of Death for Infants by Race and Type in ND, 2006-2010



Children with Birth Defects in ND

“About 1 in every 33 babies is born with a birth defect. Not all birth defects can be prevented. But a woman can take steps to increase her own chance of having a baby with the best health possible.” – CDC

- 1,196 congenital anomalies from 2003 to 2007 in ND (3% of all live births)
 - 63% cardiovascular
 - 12% gastrointestinal
 - Others include orofacial, central nervous system, chromosomal, musculoskeletal, genitourinary

Preterm and Low Weight Births in ND

“Infants born preterm are at greater risk for death in the first few days of life, as well as other adverse health outcomes including visual and hearing impairments, intellectual and learning disabilities, and behavioral and emotional problems throughout life.”
– CDC

- 10% of live births between 2005-2009 were preterm (i.e., less than 37 weeks of gestation)
- 7% of live births between 2005-2009 were low birth weight (i.e., less than 2,500 grams or 5 pounds, 8 ounces)
 - 9% of children in WIC in 2010 were born at a low birth weight



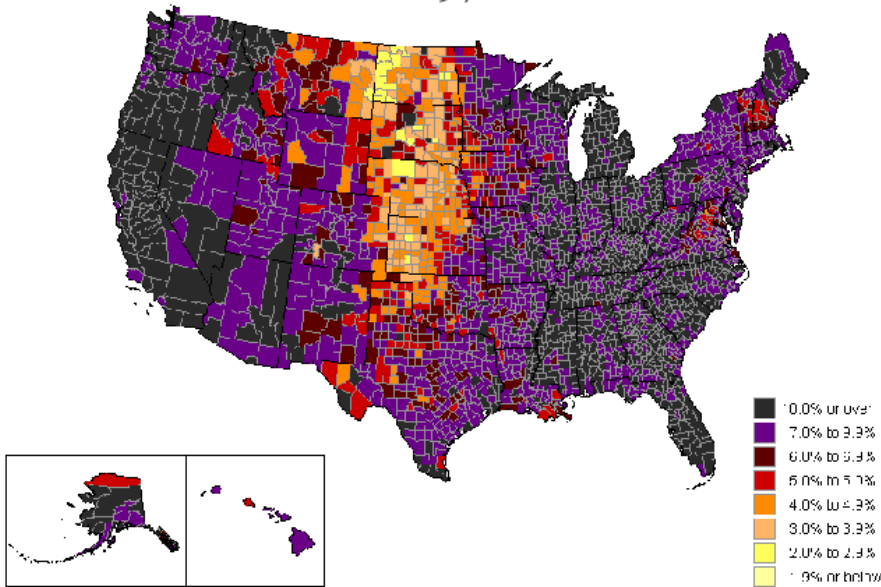
Economic Well-Being



ND's Strong Economy

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Unemployment Rates by County
November 2010
9.7%



ND rate* = 3.9% in 2010

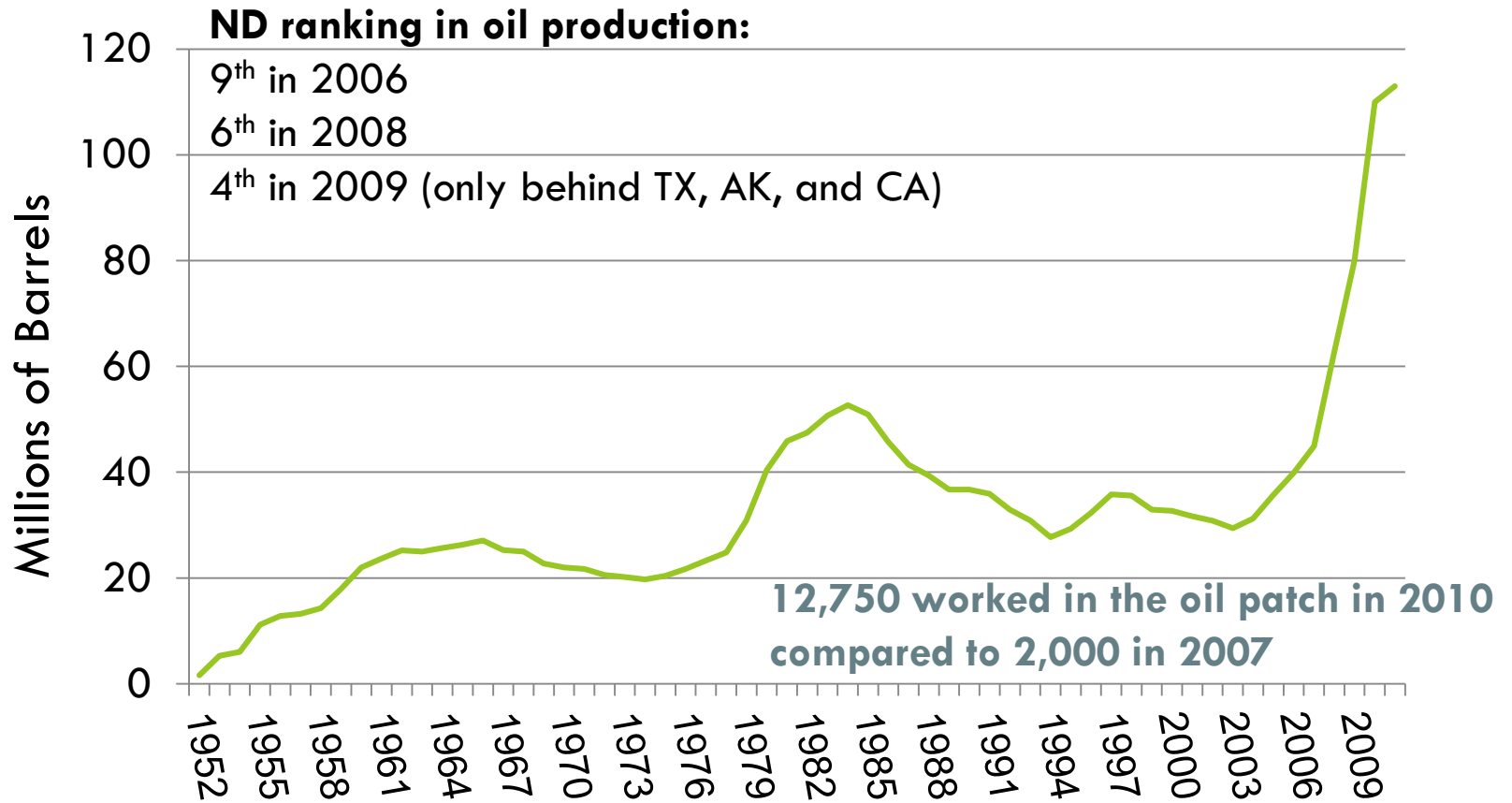
*Unemployment rates for reservations in ND not included: rates ranged from 57%-71% in 2005 according to the Bureau of Indian Affairs

Nonfarm Employment Growth in U.S. and Regional States: 2007 to 2009



Crude Oil Production in North Dakota: 1952 to 2010

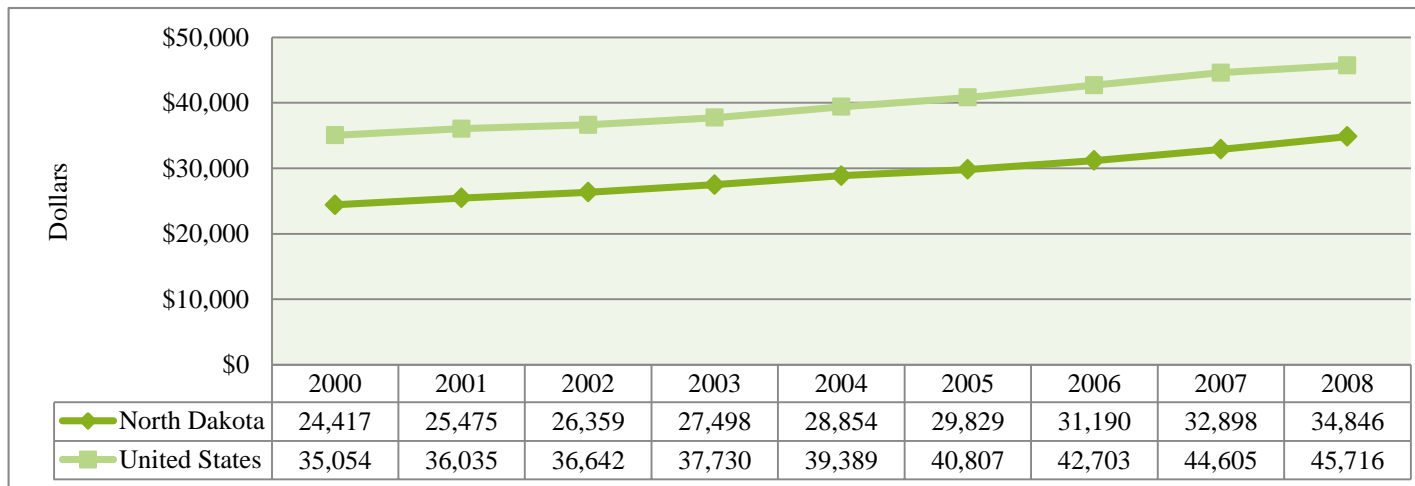
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Multiple Jobholders

Factors contributing to multiple job holding include part-time and seasonal work, low wages, and limited benefits.

- 10% of employed residents worked more than one job in ND in 2009 (2nd highest rate in the nation)
- In 2008, the average wage per job in North Dakota ranked 46th nationally at \$34,846 (24% below national average)



Income in ND

- Median household income in 2009 = \$45,140
- Median family income in 2009 = \$60,381
- 35% of children in ND lived in low-income families in 2008 (\$43,668 for 2 adults/2 children)
- 12% of children ages 0-5 lived in “working poor” households (2007 NSCH)



Cost-Burdened Housing in ND

- **15%** of housing units with a **mortgage** were cost-burdened in ND in 2009 (i.e., monthly owner costs at least 35% of household income)
- **29%** of housing units paying **rent** were cost-burdened in ND in 2009 (i.e., gross rent at least 35% of household income)

Child Poverty in ND

Being raised in poverty places children at higher risk for a wide range of problems (e.g., cognitive, social, behavioral, emotional, mental, physical) and can lead to lower occupational status and lower wages in adulthood. – Child Trends

- Federal poverty level in 2009 for family of four = \$21,954
- 12% overall
- 14% of all children 0-17 (7% in extreme poverty)
 - Rate for children hasn't changed in 10 years
- 18% of young children 0-4

Child Poverty in ND

- Rates vary greatly by race, age, household type, geography
- American Indian children:
 - 53% of all children in Sioux County (30% in extreme poverty) in 2009
 - 61% of young American Indian children 0-4
- 62% of children 0-4 living with a single mother were in poverty in 2008 (vs. 6% living with married parents)
 - In rural areas, 75% of these children were in poverty (vs. 55% in urban areas)



Insurance Status in ND

- 12,329 children were uninsured in 2007 (8% of all children)
 - 63% of these children were living in or near poverty
- 49,110 children 0-20 received health care assistance through Medicaid (20% of all children)
- 3,749 children received care through Healthy Steps CHIP who earned too much to qualify for Medicaid

Consistency of Health Insurance in ND

- 14% of children 0-17 were currently uninsured or had periods of no coverage during the year (2007 NSCH)
 - Economic differences – 29% of children in poverty compared to 6% of children at 400 percent of poverty
- 27% of children 0-17 with health insurance had insurance that was not usually/always adequate to meet their needs



TANF in ND

- The Temporary Assistance to Needy Families (TANF) program in ND provided assistance to 8,983 children ages 0 to 19 in 2009 (5% of all children statewide)
- 52% of child TANF recipients statewide were American Indian in 2009
 - 1/3 of all children in Benson, Rolette, and Sioux counties received TANF

WIC in ND

The supplemental nutrition program for women, infants, and children (WIC) provides nutritious foods, nutrition counseling, and health and social service referrals to eligible participants at no charge.

- 24,331 ND Women, Infants, and Children (WIC) program participants in 2010
- 15,645 WIC children <5 (reporting to PedNSS in 2010)
 - 38% 0-11 months, 34% 12-35 months
28% 3-4 years
 - 36% in extreme poverty
 - 9% born at low birth weight

Supplemental Nutrition Assistance Program (formerly “Food Stamp Program”) in ND

- Provided help to 37,553 children in 2010 – 1 in 4 – of all children statewide
 - ▣ Half of these children were ages 0-6 (51%)
- Average monthly benefit per person in 2009 = \$124.94



Health and Development



Overall Child Health in ND

- 91% of children 0-17 had “excellent/very good” health (2007 NSCH)
 - Economic differences – 80% of children in poverty compared to 95% of children at 400 percent of poverty
- 75% of children 1-17 had teeth in “excellent/very good” condition (6% in “fair/poor condition”)
 - Racial differences – 51% of American Indian children compared to 78% of White children

Unmet Child Health Needs in ND

- 5% of children 0-17 had one or more unmet needs for care (i.e., medical, dental, mental health, other health) in the past 12 months (2007 NSCH)
 - 12% of children in poverty
 - 15% of children without consistent health insurance
 - 11% of children with inadequate health insurance



Medical Homes for ND Children

“The American Academy of Pediatrics (AAP) developed the medical home model for delivering primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective to all children and youth.” - AAP

- 36% of children 0-17 receive health care not meeting the criteria for having a medical home
- Economic differences – 51% of children in poverty compared to 28% of children at 400 percent of poverty
- Adequate health insurance – 48% vs. 30%
- Consistency of health insurance – 51% vs. 34%

Developmental Screening in ND

- 65% of low-income children 0-21 received Early Periodic Screening, Diagnosis, and Treatment screening services in 2009
- 34% of children ages 4 months-5 years had parents with at least one concern about the child's physical, behavioral, or social development (2007 NSCH)



Child Immunizations in ND

“Making sure that children of all ages receive all their vaccinations on time is one of the most important things parents can do to ensure their children's long-term health – as well as the health of friends, classmates, and others in the community.” - CDC

- **56% of children ages 19-35 months received the full schedule of age-appropriate immunizations in 2009**
 - **Down from 78% in 2005**

Child Overweight and Obesity in ND

- Almost 1 in 3 WIC children ages 2-5 years were overweight or obese in 2010
 - 17% overweight
 - 14% obese
 - 11% White children
 - 21% American Indian children

Chronic Conditions for ND Children

- 21% of children ages 0-17 had at least 1 current chronic condition (2007 NSCH)
 - 7% had 2 or more
- 8% ages 0-17 had one or more current chronic conditions rated moderate or severe



Special Health Care Needs in ND

- 5% of children 0-3 had special health care needs (2005-06 NS-CSHCN)
- Higher proportion as children get older → 12% of children 0-17 had special health care needs
 - 49% did not have care provided in a medical home
 - 10% were without health insurance at some point during the previous year
 - 26% had inadequate health insurance

Child Welfare

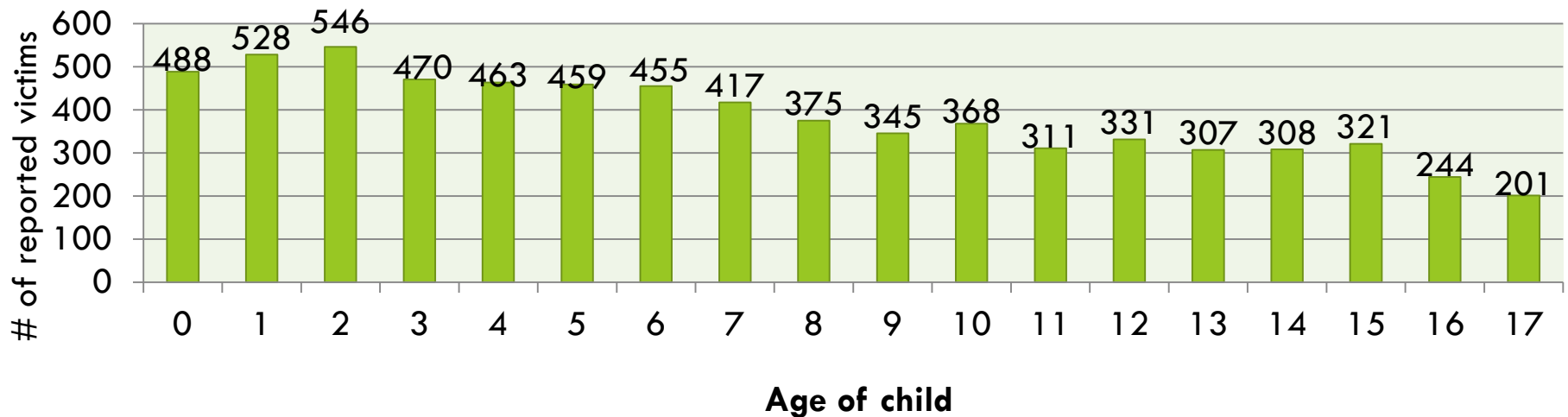


Injuries to ND Children

- 11% of children ages 0-5 had injuries in the previous 12 months that required medical attention (2007 NSCH)
 - Unintentional
 - Intentional → recent headlines in the area:
 - “Man gets probation for slapping infant child”
 - “Toddlers, wearing only dirty diapers, found alone in parking garage”
 - “Man charged in domestic dispute after children sent to get help”
 - “Man admits killing wife in front of toddler”

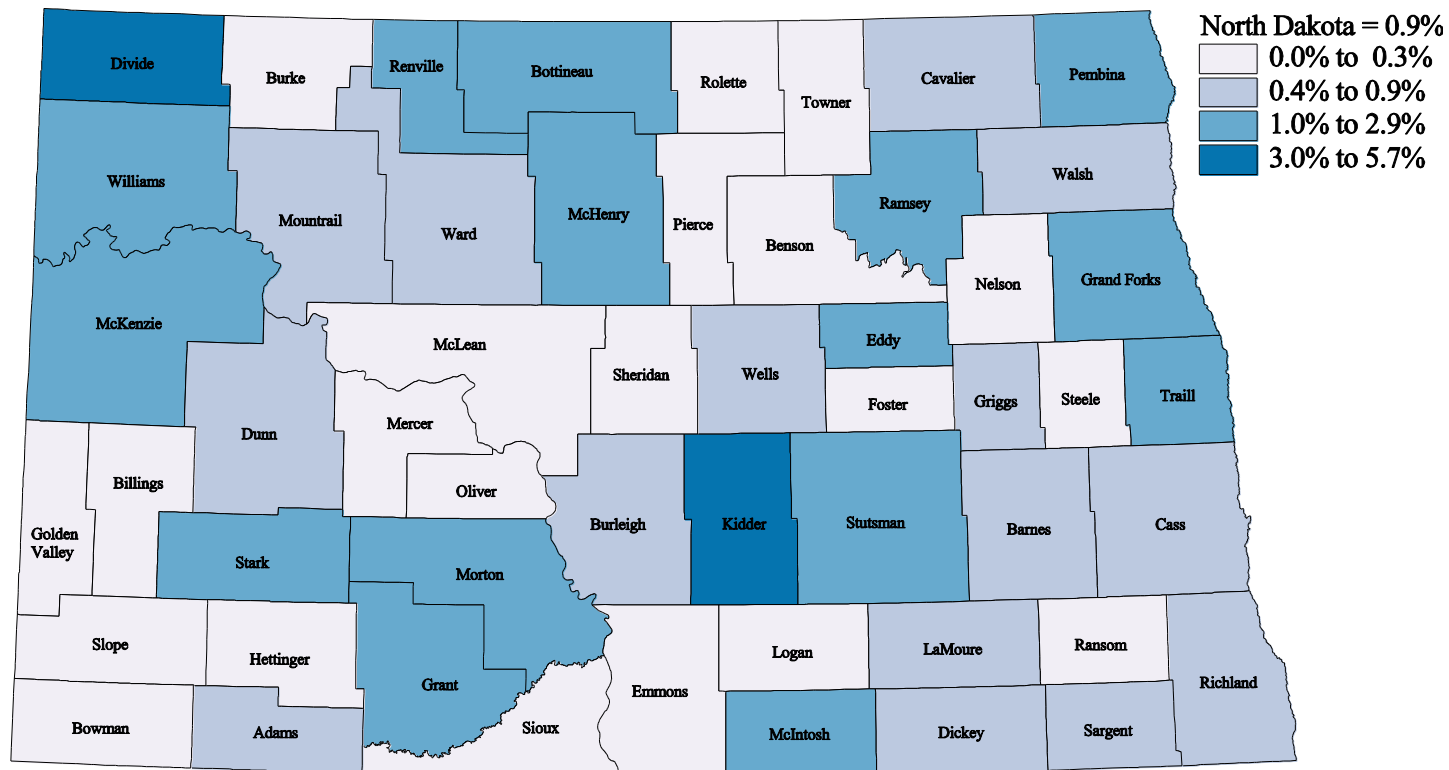
Children Suspected of Being Victims of Maltreatment in ND

- 6,937 children were suspected of being victims of child abuse and neglect in 2009
 - Younger children at greater risk (29% are ages 0-3)



Children in Cases of Abuse or Neglect Where Services Were Required in ND

- 1,257 child abuse and neglect victims where services were required in 2009
- As percent of all children ages 0-17 by county:



Children Impacted by Domestic Violence in ND

Children exposed to violence are more likely to suffer from attachment issues, anxiety, depression, and other health-related problems. – Child Trends

- Includes physical, sexual, and emotional abuse
 - Of the 4,569 victims who received services from one of ND's 21 crisis intervention centers in 2010, 94% were women
 - 26% younger than age 25
 - 3% pregnant at the time of the assault
- 3% of children were directly impacted by incidents of domestic violence, as high as 8% in Sheridan and Sioux counties

Children in Foster Care in ND

Child welfare research has shown that youth who live in institutional settings are at a greater risk of developing physical, emotional, and behavioral problems and are less likely to find a permanent home than those who live in foster families. – NDKC

- 1,912 children received foster care services in 2010 (1% of children 0-18)
 - 76% in family home environment
 - 22% in a group home or institution
- 18% of foster care children were ages 0-3 in 2009
- 25% of foster care children were American Indian

Young Child Risk Calculator

These risk factors are known to increase the chance of poor health, school, and developmental outcomes for young children. Children with three or more risks are exceptionally vulnerable. – NCCP

- Risk factors are:
 - low-income, single parent, teen mother, low parental education, unemployed parents, residential mobility, households without English speakers, large family size (i.e., 4 or more children)
- 41% of children 0-5 in ND had 1-2 risk factors in 2009
- Another 14% had at least 3 risk factors

Parental Depression

“Major depression in either parent can interfere with parenting quality and increase the risk of children developing mental, behavioral and social problems.” – National Research Council and Institute of Medicine

- According to a recent CDC survey, 11% to 18% of women nationwide reported having frequent postpartum depressive symptoms
- 6% of children ages 0-5 in ND have mothers (4% fathers) in the household with fair/poor mental and emotional health (2007 NSCH)

Early Care and Education



Working Mothers in ND

- 82% of mothers with children 0-17 are in the labor force in 2009
 - 2nd behind UT, tied with CT
 - 72% nationwide
- 77% of mothers with young children 0-5 are in the labor force (also 2nd)
 - 86% for mothers with children 6-17 only



Child Care Capacity in ND

Informal networks of relatives, friends, and neighbors provide care for many North Dakota children. These situations are difficult to track and the number of providers and quality of care are not monitored.

- Legally recognized child care providers had capacity to care for 38% of all children 0-13
 - Based on #s of working parents, 76% of children 0-13 may require care
- Most legally recognized care is licensed (34% of the 38% capacity)
 - Region 1 (NW corner of state) has capacity to serve only 14% of children 0-13



Child Care for Families with Children 0-5 in ND

- 26% did *not* need child care in the previous month (2007 NSCH)
 - vs. 37% nationally
- 42% received 10 or more hours per week of child care from non-relatives (e.g., day care, preschool, Head Start)
 - vs. 29% nationally



Child Care Issues for ND Families

- 27% of people had to make unexpected last minute changes in child care arrangements at least once in the previous month (2007 NSCH)
- 11% of families with children ages 0-5 had their work life affected by child care issues
 - Economic differences – 29% of families in poverty compared to 6% of families at 400 percent of poverty
- \$7,503 = Average annual cost for one infant in a licensed child care center in 2010
 - 52% of referral requests from CCR&R were for children under age 2
 - Average yearly cost for 4-year-old in center-based care in 2009 exceeded the annual in-state tuition at a public 4-year college in ND



Child Care Assistance in ND

- 7,757 children 0-13 were in low-income families who received help paying child care bills in 2010
 - 7% of all children 0-13 statewide
- Reasons families received subsidy in 2009
 - 79% employment, 12% training/education, 7% employment and training/education
- 72% of families had co-payment
 - On average, 20% of monthly income
- Age of child receiving assistance:
 - 40% infants and toddlers (under 3 years), 35% preschoolers (3-5 years), 25% school age (6-13 years)

Family Involvement in ND

“Young children whose parents read to them, tell stories, or sing songs tend to develop larger vocabularies.”
– The Annie E. Casey Foundation

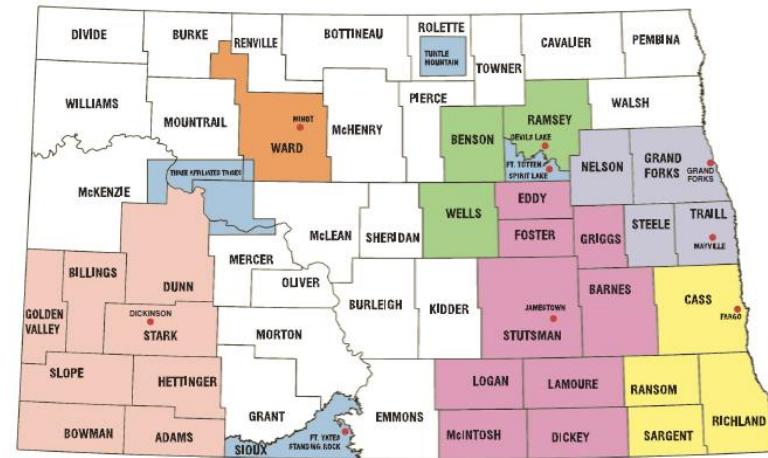
- 9% of ND children ages 1-5 were read to less than three days per week by family members (2007 NSCH)



ND Early Head Start

Early Head Start is a federally funded community-based program for low-income families with infants and toddlers and pregnant women designed to promote healthy prenatal outcomes for pregnant women, enhance the development of very young children, and promote healthy family functioning. – EHS

- Eight programs
- 565 funded enrollment in 2011:
 - 548 infants and toddlers in 2010
 - 82 pregnant women in 2010
- Race/ethnicity of enrolled participants in 2010:
 - 34% American Indian
 - 51% White
 - 9% multiple races
- 11% have diagnosed disability
- 7% are homeless families



Early Head Start

- “Participating **children** [in Early Head Start] perform significantly better in cognitive, language, and social-emotional development than their peers who do not participate. The program also had important impacts on many aspects of **parenting and the home environment**, and supported parents' progress toward economic self-sufficiency” – 2004 report to Congress


ND Early Head Start Services

- 90% of families accessed at least one family service:
 - 81% parent education
 - 80% health education
 - 47% emergency/crisis intervention
 - 39% mental health services
 - 23% housing assistance
 - 21% transportation assistance
 - 20% adult education
 - 14% job training
- Services to pregnant mothers
 - Nearly all: Information on benefits of breastfeeding, prenatal and postpartum health care, prenatal education on fetal development (96-100%)
 - 46% mental health interventions and follow-up

Further Benefits of High Quality Early Education Programs

- “Careful analysis of the costs and benefits of early-education programs shows ... that such investments are profitable both for individuals and for the society as a whole because they return high gains for every dollar spent.”

Economic Benefits and Costs of Two Early Childhood Interventions



	Perry	Chicago CPC
Child-Care Benefit	986	1,916
Earnings Increase	40,537	32,099
K-12 Savings	9,184	5,634
College/Adult Costs from Extra Education	-782	-644
Reduced Crime	94,065	15,329
Reduced Welfare Use	355	546
Future Generation Earnings Effect	6,181	4,894
Reduced Abuse/Neglect	0	344
Total Benefits	150,525	60,117
Total Costs	16,514	7,738
Net Present Value	134,011	52,380
Benefits-to-Costs Ratio	9.11	7.77

Source: Barnett, 2004.

OLDER KIDS: Reading by the End of Third Grade

“Up until the end of third grade, most children are *learning to read*. Beginning in fourth grade, however, they are *reading to learn*.” –The Annie E. Casey Foundation

- 65% of 4th graders in ND scored below proficient reading level (rank=17th best)
 - 84% of American Indian 4th graders
 - 78% of 4th graders eligible for free/reduced-price school lunch

Focus on

American Indian Children



Population Dynamics Among American Indian Children in ND

- Largest minority group and growing
- Increasing proportion of state's population
- More than half live on reservations
 - Some reservation counties among those growing in population
- Children make up larger portion of American Indian population than for Whites
 - An even larger proportion of young children 0-3

Challenges Facing American Indian Children in ND

- Infant mortality rate more than twice as high as for Whites; higher rates of neonatal and postneonatal deaths as well
- Much higher rates of unemployment
- Most affected by high rates of child poverty; more than 1 in 2 children 0-3 in poverty
- Half of all TANF recipients in the state; 1 in 3 children in three reservation counties
- Twice the rate of obesity among American Indian young children as Whites
- 1 /3 of Early Head Start participants
- At least 4 in 5 scored below proficient reading level in 4th grade

Challenges in ND Planning Region 3

- Region 3 is of particular concern (Turtle Mountain and Spirit Lake reservations in Benson, Cavalier, Ramsey, Rolette and Towner counties)
 - Highest teen birth rate
 - Highest proportion of mothers receiving inadequate prenatal care
 - Lowest ACT scores, highest rate of idle teens
 - 2nd highest rate of newborns who failed a hearing screening
 - Highest proportion of children living in single-parent families
 - Highest poverty rate, lowest median family income, highest proportion of children receiving TANF, free or reduced-price lunch, SNAP, and child care assistance

Focus on Children in Western ND



Dynamics of Western ND

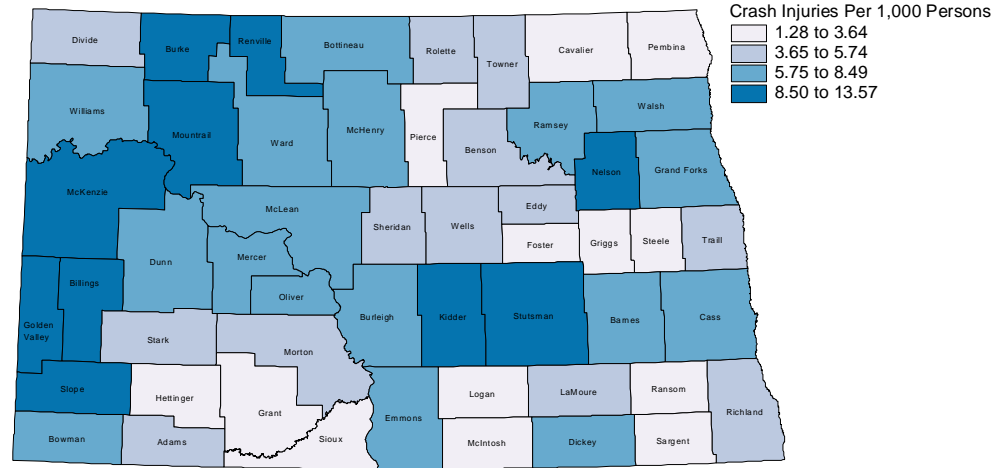
- Data lag, but can still see challenges/trends
- Impact of oil boom
 - Several counties showing growth are in western ND
 - Increase in prime working force/young adults – increases in young children
 - Community strategies to retain the growth, draw in families?
 - Housing challenges – shortages, increasing costs
 - High wages – yet pockets of poverty persist
 - High school dropouts, domestic violence, child abuse and neglect, motor vehicle injuries and fatalities
 - Child care shortages

Injuries and Fatalities from Motor Vehicle Crashes in ND

Injuries from Motor Vehicle Crashes Per 1,000 Population in North Dakota by County: 2009
 Source: North Dakota Department of Transportation, "2009 Crash Summary"

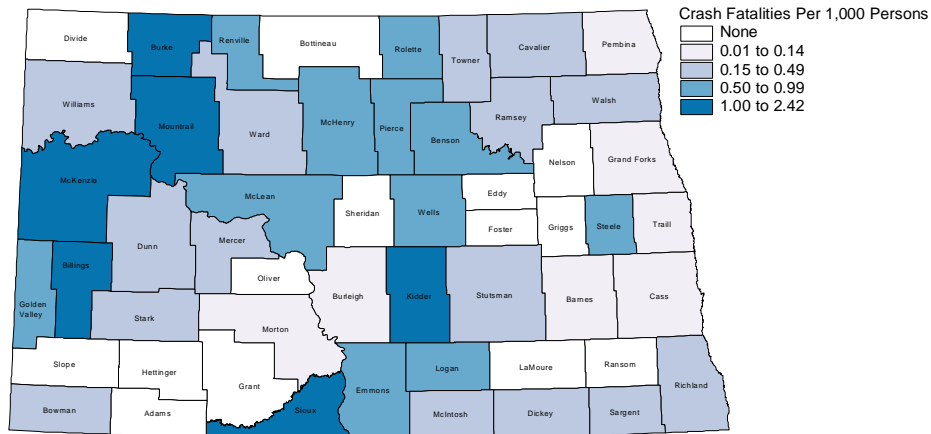
Rates per 1,000
Population in 2009

Injuries →



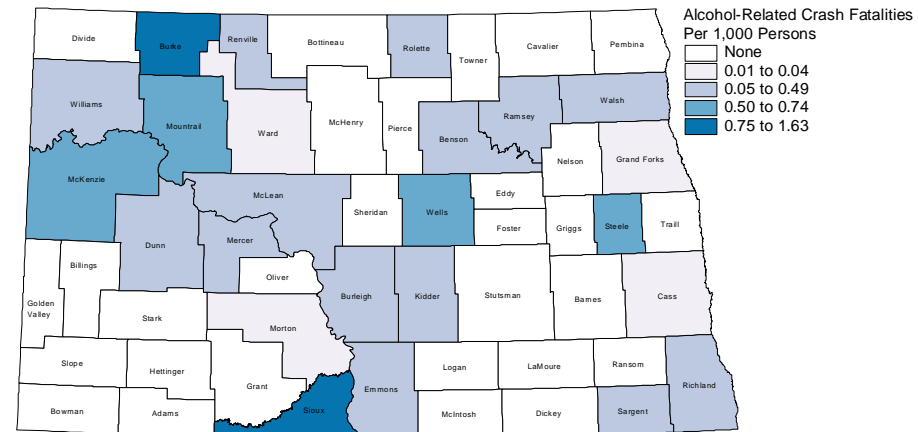
Fatalities ↓

Fatalities from Motor Vehicle Crashes Per 1,000 Population in North Dakota by County: 2009
 Source: North Dakota Department of Transportation, "2009 Crash Summary"



Alcohol-Related
Fatalities ↓

Alcohol-Related Fatalities from Motor Vehicle Crashes Per 1,000 Population in North Dakota by County: 2009
 Source: North Dakota Department of Transportation, "2009 Crash Summary"



Key Messages for North Dakota

- Most children are doing well, but many are not
- Many vulnerable populations are growing
- Well-being comprises several dimensions
- Data strengths and limitations



Well-Being of North Dakota's Infants and Toddlers

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PowerPoint Presentation
and Briefing Points are
available at:
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