

# Social Determinants of Health and Health Data Panel

28<sup>th</sup> Annual Nebraska Data Users Conference,  
9:00-10:00 A.M., August 16, 2017

David Drozd, UNO Center for Public Affairs Research  
402-554-2132     [ddrozd@unomaha.edu](mailto:ddrozd@unomaha.edu)

Carol Gilbert, CityMatCH  
402-552-9589     [cgilbert@unmc.edu](mailto:cgilbert@unmc.edu)

Tom Rauner, NE Department of Health and Human Services  
402-471-0148     [thomas.rauner@nebraska.gov](mailto:thomas.rauner@nebraska.gov)

Athena Ramos, UNMC  
402-559-2095     [aramos@unmc.edu](mailto:aramos@unmc.edu)



## Place Matters: Lincoln maps highlight health disparities across neighborhoods, zip codes



JUNE 13, 2015 11:00 PM • BY ERIN ANDERSEN | LINCOLN JOURNAL STAR

The average life expectancy of a southeast Lincoln resident is 91.8 years.

But, head north or west, and your life expectancy drops -- not by years, but by decades.

Just seven miles separates whether you will live into your 90s, or die in your 60s, according to Lincoln/Lancaster County Health Department statistics.

"Where we live affects how we live," said Lori Vrtiska Seibel, president and CEO of Community Health Endowment of Lincoln.

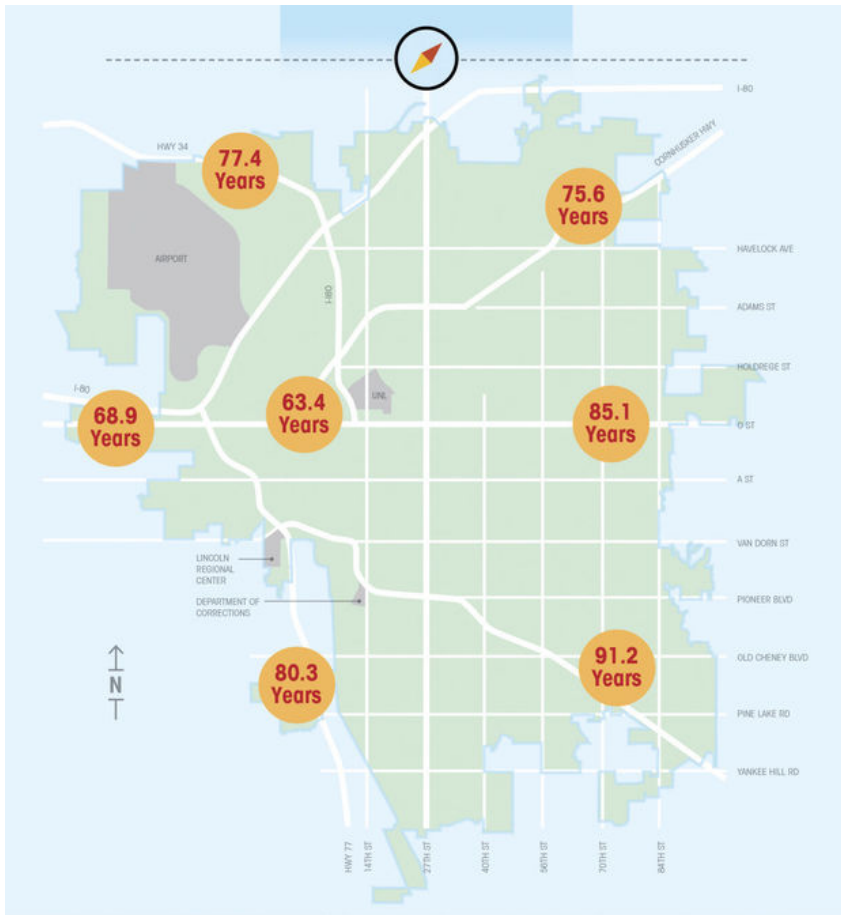
Generally speaking, the more impoverished your neighbors and neighborhood, the worse off you are in nearly every demographic category.

"These are big issues; not little tweaks," Seibel said. "Literally it is shaving years off of a person's life."

"A person's ZIP code is more important to their health than their genetic code," according to David Erickson, director of the Center for Community Development Investments with the Federal Reserve Bank of San Francisco, California, and a national guru on the relationship between health, housing and community development.



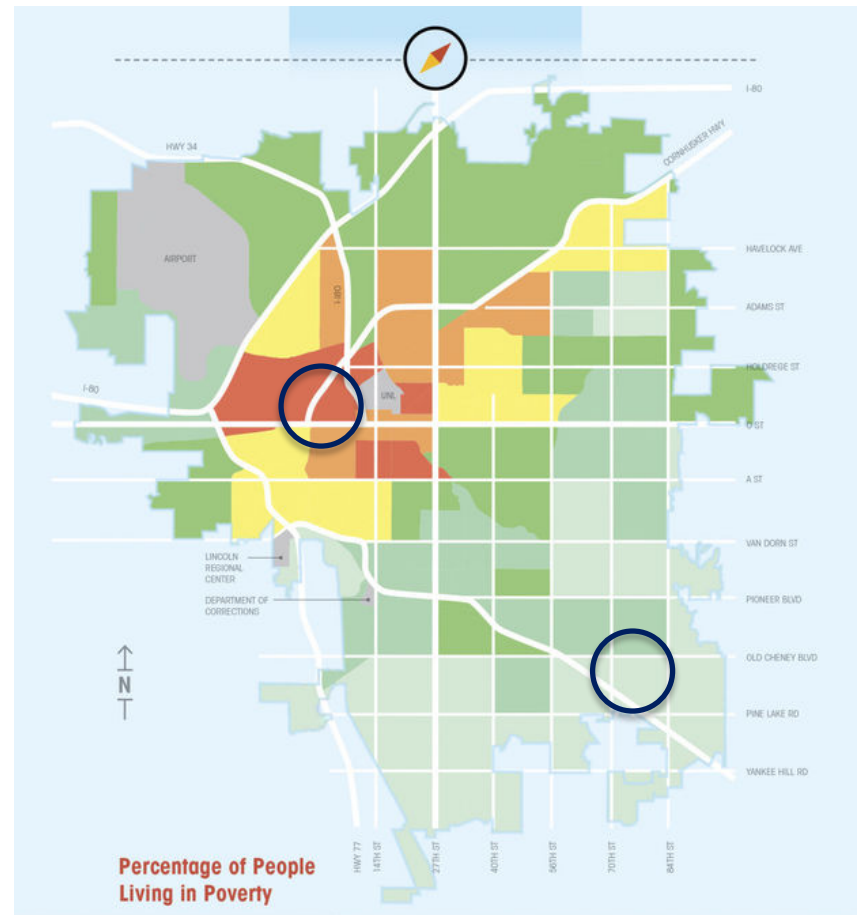
# A look at some determinant related maps



## Life Expectancy

The average life expectancy for babies born to mothers in Lincoln varies dramatically across the city. Babies born to mothers living in southeast Lincoln can expect to live nearly three decades longer than babies born to mothers in central Lincoln just a few miles away.

Data Source: Lincoln-Lancaster County Health Department



## Poverty 2009-2013

By 2013, it is clear that Lincoln is experiencing a suburbanization of poverty with 42 census tracts having at least 10% of residents living in poverty. Programs designed to serve the urban poor must adapt to serve residents living across the city.

Data Source: United State Census Bureau



# Data on Health Topics from Census



- Disability - ACS asks about 6 different types of difficulties and having one or more creates a “has disability or not” variable
  - Vision, Hearing, Cognitive, Ambulatory (walking/climbing stairs), self-care (dressing/bathing), and independent living (shopping, visiting a doctor)
- Health Insurance Coverage - ACS and CPS define the “uninsured”
  - ACS asks about 7 specific different types of coverage
    - Private: employer/union, direct purchase, TRICARE or military
    - Public: Medicare, Medicaid, VA, CHIP, etc.
- ACS questions on disability were redesigned in 2008; it asked the first health insurance questions in 2008 (CPS from 1999)
- Fertility - birth in the past year for women aged 15-50
  - Annual data on ACS; bi-annual from CPS June supplement
- Much of the Census data’s “power” is from cross-tabulation by other characteristics (education level, income, age, LF status)



# Census Variables on Health Determinants



- Many socio-economic characteristics might relate to a person's or household's health status
  - Education level
  - Employment/Unemployment
  - Income/Poverty/Food Stamp (SNAP) reciprocity
  - Home ownership (vs. renting)
  - Home occupancy/vacancy in neighborhood
  - Moves in the last year/when person moved into unit (residential turnover)
  - Language spoken/Foreign born (new immigrants)
  - Age of housing stock
  - Household/Family type
    - Persons living alone; “single parents”; grandparents responsible for grandchildren
  - Demographics: Age, Gender, Race/Ethnicity

SELECTED CHARACTERISTICS OF HEALTH INSURANCE COVERAGE IN THE UNITED STATES  
2011-2015 American Community Survey 5-Year Estimates

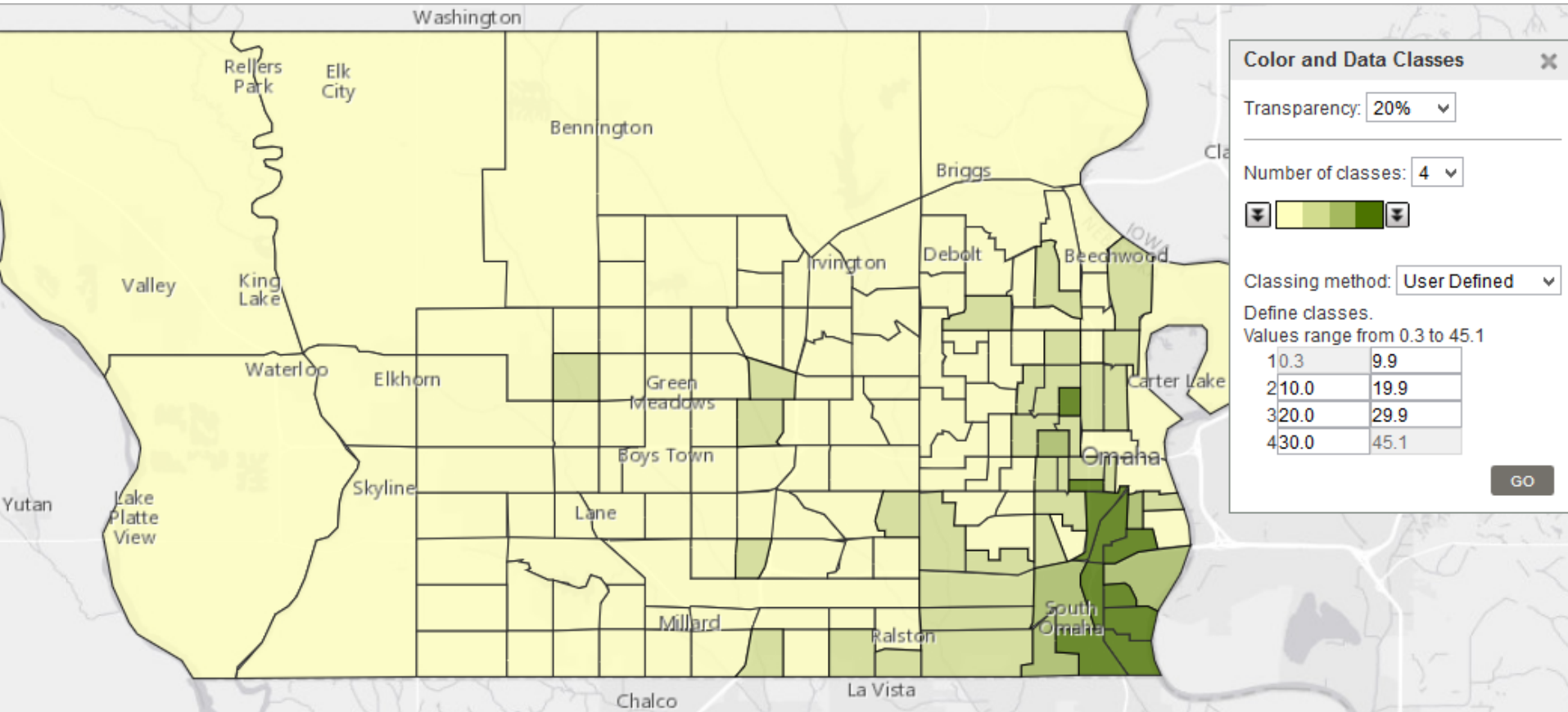
Subject	Douglas County, Nebraska									
	Total		Insured		Percent Insured		Uninsured		Percent Uninsured	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Civilian noninstitutionalized population	531,473	+/-446	471,455	+/-1,879	88.7%	+/-0.3	60,018	+/-1,848	11.3%	+/-0.3
<b>AGE</b>										
Under 18 years	138,542	+/-89	131,672	+/-662	95.0%	+/-0.5	6,870	+/-653	5.0%	+/-0.5
Under 6 years	49,188	+/-544	47,015	+/-733	95.6%	+/-0.7	2,173	+/-341	4.4%	+/-0.7
6 to 17 years	89,354	+/-534	84,657	+/-687	94.7%	+/-0.6	4,697	+/-519	5.3%	+/-0.6
18 to 64 years	334,578	+/-338	281,821	+/-1,675	84.2%	+/-0.5	52,757	+/-1,633	15.8%	+/-0.5
18 to 24 years	50,657	+/-173	41,153	+/-704	81.2%	+/-1.4	9,504	+/-716	18.8%	+/-1.4
25 to 34 years	85,010	+/-188	68,099	+/-862	80.1%	+/-1.0	16,911	+/-809	19.9%	+/-1.0
35 to 44 years	68,701	+/-131	56,258	+/-737	81.9%	+/-1.1	12,443	+/-730	18.1%	+/-1.1
45 to 54 years	69,166	+/-125	60,153	+/-611	87.0%	+/-0.9	9,013	+/-592	13.0%	+/-0.9
55 to 64 years	61,044	+/-125	56,158	+/-431	92.0%	+/-0.7	4,886	+/-404	8.0%	+/-0.7
65 years and older	58,353	+/-273	57,962	+/-325	99.3%	+/-0.3	391	+/-191	0.7%	+/-0.3
65 to 74 years	33,274	+/-146	33,016	+/-191	99.2%	+/-0.4	258	+/-141	0.8%	+/-0.4
75 years and older	25,079	+/-237	24,946	+/-264	99.5%	+/-0.5	133	+/-131	0.5%	+/-0.5
19 to 25 years	52,008	+/-676	41,854	+/-894	80.5%	+/-1.4	10,154	+/-748	19.5%	+/-1.4
<b>SEX</b>										
Male	260,778	+/-352	228,496	+/-1,304	87.6%	+/-0.5	32,282	+/-1,222	12.4%	+/-0.5
Female	270,695	+/-257	242,959	+/-1,089	89.8%	+/-0.4	27,736	+/-1,106	10.2%	+/-0.4
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>										
White alone	420,430	+/-1,754	380,490	+/-2,016	90.5%	+/-0.4	39,940	+/-1,504	9.5%	+/-0.4
Black or African American alone	59,333	+/-827	49,590	+/-924	83.6%	+/-1.2	9,743	+/-764	16.4%	+/-1.2
American Indian and Alaska Native alone	3,275	+/-474	2,243	+/-347	68.5%	+/-6.8	1,032	+/-297	31.5%	+/-6.8
Asian alone	16,885	+/-407	15,539	+/-455	92.0%	+/-1.4	1,346	+/-234	8.0%	+/-1.4
Native Hawaiian and Other Pacific Islander alone	215	+/-56	134	+/-51	62.3%	+/-17.6	81	+/-45	37.7%	+/-17.6
Some other race alone	16,750	+/-1,591	10,566	+/-1,125	63.1%	+/-3.6	6,184	+/-873	36.9%	+/-3.6
Two or more races	14,585	+/-928	12,893	+/-846	88.4%	+/-1.8	1,692	+/-296	11.6%	+/-1.8
Hispanic or Latino (of any race)	62,910	+/-163	44,050	+/-1,005	70.0%	+/-1.6	18,860	+/-1,028	30.0%	+/-1.6
White alone, not Hispanic or Latino	377,530	+/-524	349,694	+/-1,445	92.6%	+/-0.4	27,836	+/-1,365	7.4%	+/-0.4
<b>NATIVITY AND U.S. CITIZENSHIP STATUS</b>										
Native born	482,880	+/-1,391	440,357	+/-2,029	91.2%	+/-0.4	42,523	+/-1,766	8.8%	+/-0.4
Foreign born	48,593	+/-1,306	31,098	+/-1,026	64.0%	+/-1.7	17,495	+/-1,025	36.0%	+/-1.7
Naturalized	15,639	+/-862	13,230	+/-714	84.6%	+/-2.4	2,409	+/-426	15.4%	+/-2.4
Not a citizen	32,954	+/-1,354	17,868	+/-932	54.2%	+/-2.1	15,086	+/-987	45.8%	+/-2.1

*So if you know  
or can find out  
where your  
foreign born  
population is...*

DP02

**SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES  
2011-2015 American Community Survey 5-Year Estimates**

**Thematic Map of Percent; PLACE OF BIRTH - Total population - Foreign born  
Geography: by Census Tract**

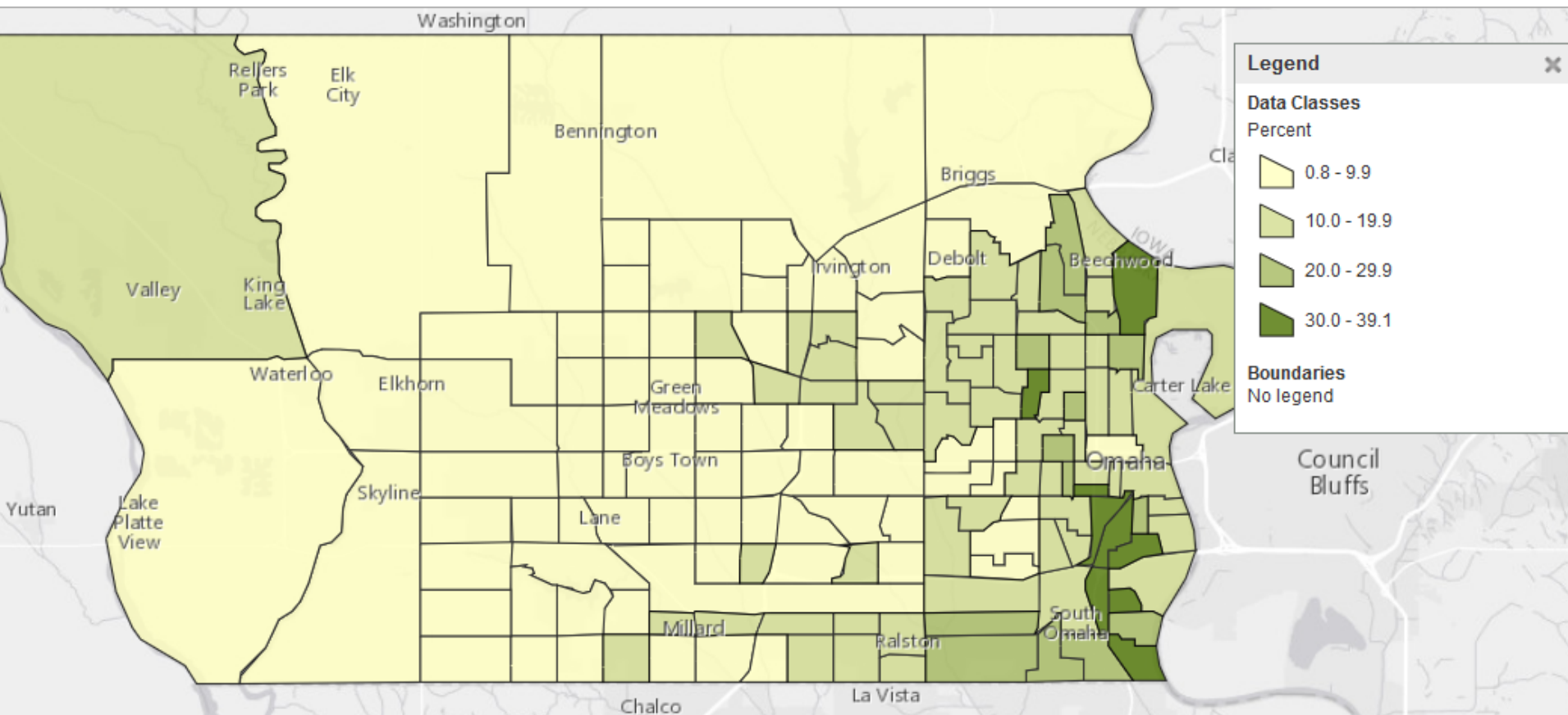


*You can target programs where health insurance might be needed...*

S2701

SELECTED CHARACTERISTICS OF HEALTH INSURANCE COVERAGE IN THE UNITED STATES  
2011-2015 American Community Survey 5-Year Estimates

**Thematic Map of Percent Uninsured; Estimate; Civilian noninstitutionalized population  
Geography: by Census Tract**

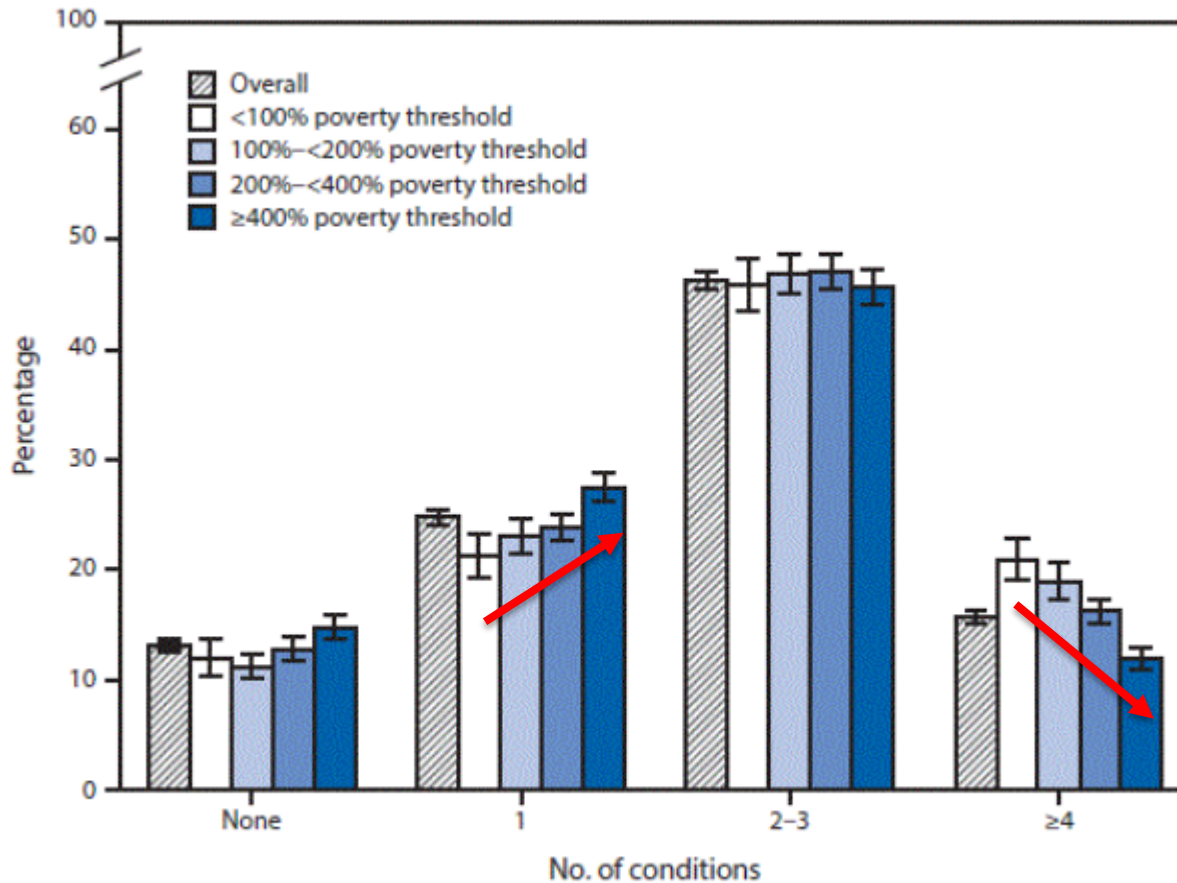


Note: the correlation coefficient between the foreign born % and the uninsured % for the 156 Douglas County tracts in the 2011-15 ACS was 0.74 (highly correlated).



# QuickStats: Age-Adjusted Percentage\* of Adults Aged ≥65 Years,<sup>†</sup> by Number of 10 Selected Diagnosed Chronic Conditions<sup>§</sup> and Poverty Status — National Health Interview Survey, 2013–2015

Weekly / February 24, 2017 / 66(7);197



\* With error bars indicating 95% confidence intervals.

“Those in the lowest income group were less likely to have none or only one of the chronic conditions compared with those in the highest income group.”

“lowest income group also more likely to have 4 or more conditions than those in the highest income group (21% vs. 12%)”

# Racial and Geographic Differences in Breastfeeding – United States, 2011–2015

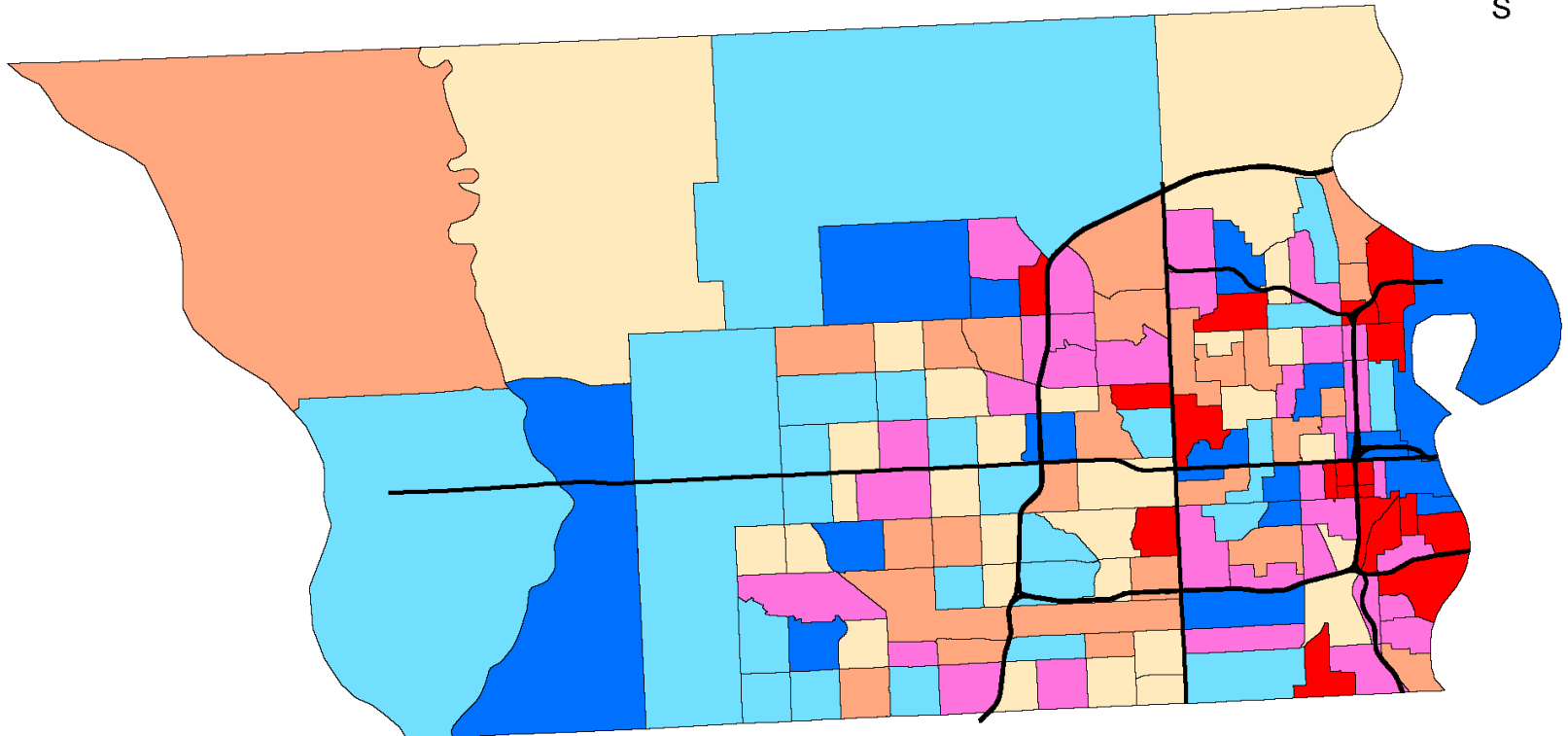
Weekly / July 14, 2017 / 66(27);723–727 <https://www.cdc.gov/mmwr/volumes/66/wr/mm6627a3.htm>

**TABLE 1. National prevalence of breastfeeding initiation, exclusive breastfeeding through age 6 months, and duration of breastfeeding at age 12 months\* among children aged 19–35 months, by selected demographic characteristics – National Immunization Survey, United States, 2011–2015†**

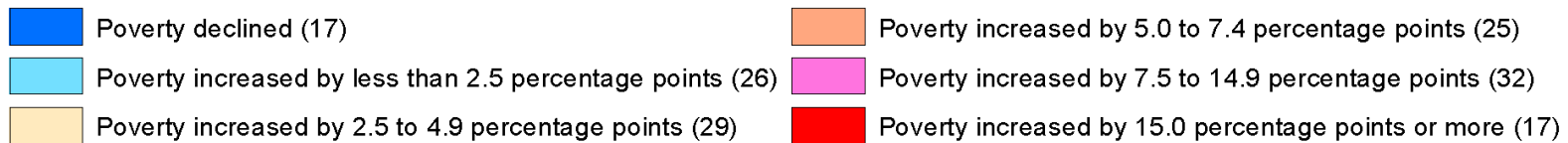
[Return](#) [Top](#)

Characteristic	No. of respondents <sup>§</sup>	Initiated breastfeeding % (95% CI)	Breastfed exclusively through 6 months % (95% CI)	Breastfed at 12 months % (95% CI)
<b>Total</b>	88,436–90,692	79.2 (78.7–79.7)	20.0 (19.5–20.5)	27.8 (27.2–28.4)
<b>Child's race/ethnicity<sup>¶, **</sup></b>				
White, non-Hispanic	49,868–51,359	81.5 (80.9–82.1)	22.5 (21.9–23.1)	30.8 (30.1–31.5)
Black, non-Hispanic	9,091–9,255	64.3 (62.7–65.9)	14.0 (12.7–15.3)	17.1 (15.8–18.4)
Hispanic	17,775–18,075	81.9 (80.8–83.0)	18.2 (17.0–19.4)	26.3 (24.9–27.7)
<b>% of poverty level<sup>††</sup></b>				
<100	22,840–23,232	70.7 (69.6–71.8)	14.7 (13.8–15.6)	20.3 (19.3–21.3)
100–199	17,735–18,184	77.6 (76.5–78.7)	18.9 (17.9–19.9)	26.0 (24.8–27.2)
200–399	22,579–23,193	84.9 (84.1–85.7)	23.9 (22.9–24.9)	33.1 (32.0–34.2)
400–599	13,727–14,149	88.0 (87.1–88.9)	26.5 (25.1–27.9)	36.7 (35.2–38.2)
≥600	11,555–11,934	90.1 (89.2–91.0)	25.8 (24.1–27.5)	36.8 (35.0–38.6)
<b>Recipient of WIC</b>				
Yes	40,182–40,925	72.1 (71.3–72.9)	14.5 (13.8–15.2)	19.7 (18.9–20.5)
No (but eligible)	6,265–6,461	81.9 (79.9–83.9)	27.6 (25.6–29.6)	37.9 (35.7–40.1)
No (not eligible)	41,576–42,865	89.6 (89.1–90.1)	27.2 (26.4–28.0)	38.3 (37.4–39.2)
<b>Mother's education</b>				
Less than high school diploma or GED	9,329–9,496	68.8 (67.2–70.4)	14.5 (13.1–15.9)	21.8 (20.2–23.4)
High school diploma or GED	16,317–16,651	69.7 (68.5–70.9)	16.0 (15.0–17.0)	19.7 (18.6–20.8)
Some college	23,230–23,809	80.5 (79.6–81.4)	17.8 (16.8–18.8)	23.4 (22.3–24.5)
College graduate	39,560–40,736	91.1 (90.7–91.5)	27.7 (26.9–28.5)	40.3 (39.4–41.2)

# Change in Poverty Rate: 2000 to 2011-2015 Timeframe



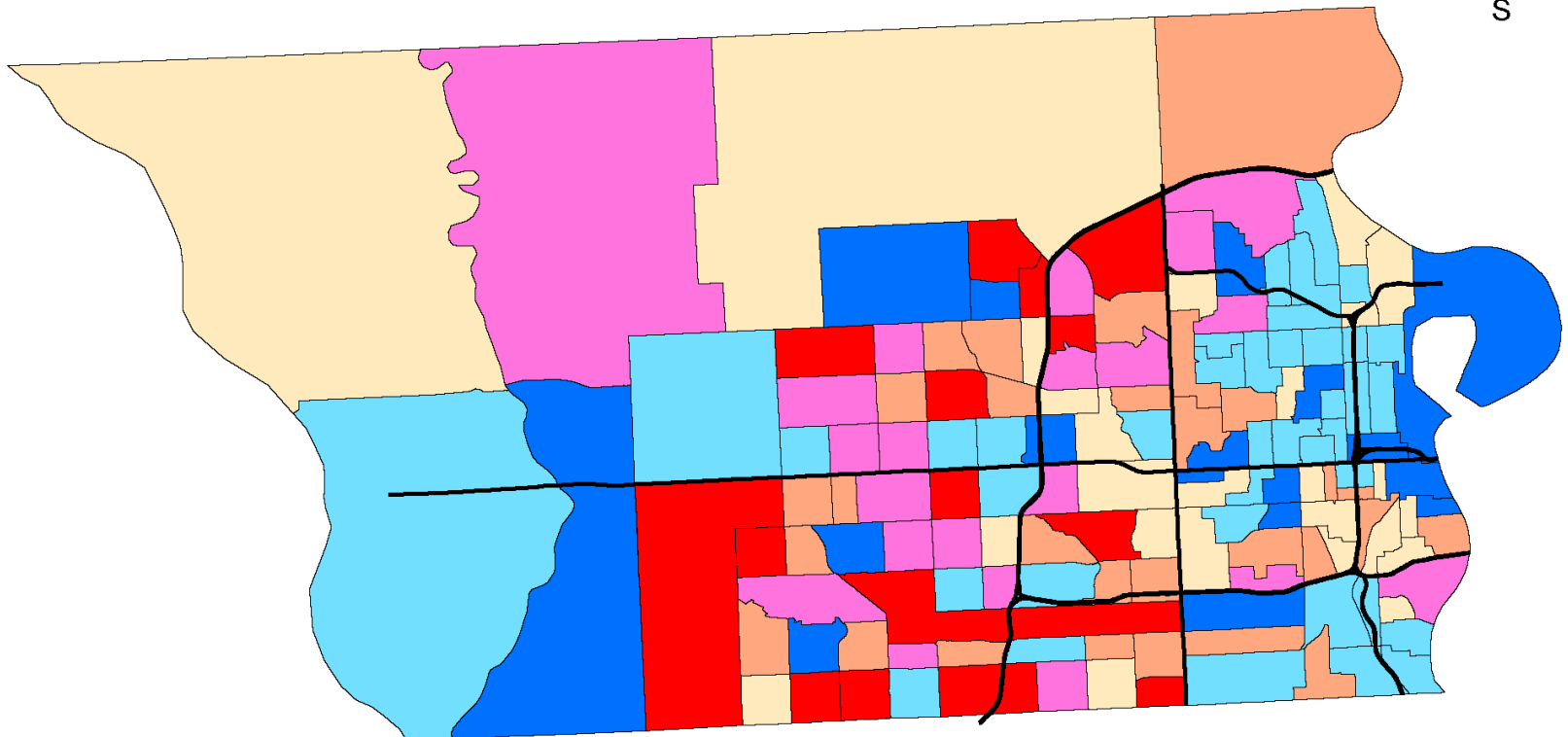
Change in Poverty Rate 2000 to 2011-15, Countywide = 4.7 percentage points (# of Census Tracts)



Sources: Table P087, 2000 Census (SF3); Table B17001, 2011-15 American Community Survey, U.S. Census Bureau; 2000-based Douglas County Census Tracts

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: July 14, 2017

# Percent Change in Poverty Rate: 2000 to 2011-2015 Timeframe



Percent Change in Poverty Rate 2000 to 2011-15, Countywide = 48.2% (Number of Census Tracts)

- |   |  |
|---|--|
|  Poverty declined (17)                   |  Poverty increased by 100 to 199% -- at least doubled (29)    |
|  Poverty increased by less than 50% (39) |  Poverty increased by 200 to 299% -- at least tripled (20)    |
|  Poverty increased by 50 to 99% (25)     |  Poverty increased by 300% or more -- quadrupled or more (16) |

Sources: Table P087, 2000 Census (SF3); Table B17001, 2011-15 American Community Survey, U.S. Census Bureau; 2000-based Douglas County Census Tracts

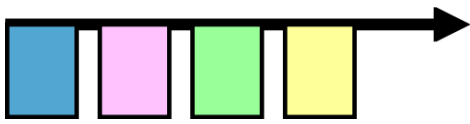
Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: July 14, 2017

POVERTY STATUS IN THE PAST 12 MONTHS OF FAMILIES  
2011-2015 American Community Survey 5-Year Estimates

Subject	Omaha-Council Bluffs, NE-IA Metro Area											
	All families				Married-couple families				Female householder, no husband present			
	Total		Percent below poverty level		Total		Percent below poverty level		Total		Percent below poverty level	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Families	225,879	+/-1,406	8.6%	+/-0.3	170,632	+/-1,530	3.6%	+/-0.3	40,087	+/-1,203	27.9%	+/-1.3
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>												
Families with a householder who is--												
White alone	197,285	+/-1,355	6.5%	+/-0.3	155,288	+/-1,476	2.9%	+/-0.3	29,594	+/-1,037	23.2%	+/-1.4
Black or African American alone	15,271	+/-518	26.2%	+/-2.3	6,474	+/-434	9.1%	+/-2.3	7,456	+/-403	42.0%	+/-3.6
American Indian and Alaska Native alone	1,160	+/-181	29.8%	+/-7.6	717	+/-144	18.7%	+/-11.0	426	+/-117	49.1%	+/-11.3
Asian alone	4,885	+/-280	14.7%	+/-2.8	4,002	+/-228	11.2%	+/-3.1	631	+/-165	39.6%	+/-11.8
Native Hawaiian and Other Pacific Islander alone	98	+/-46	12.2%	+/-17.5	68	+/-38	0.0%	+/-33.9	27	+/-31	44.4%	+/-55.6
Some other race alone	4,116	+/-364	24.7%	+/-5.1	2,223	+/-271	15.9%	+/-5.0	1,134	+/-242	40.7%	+/-11.1
Two or more races	3,064	+/-310	15.9%	+/-4.2	1,860	+/-242	6.8%	+/-3.3	819	+/-162	32.2%	+/-10.9
Hispanic or Latino origin (of any race)	16,527	+/-428	24.1%	+/-2.4	10,233	+/-500	15.2%	+/-2.2	3,977	+/-344	48.1%	+/-5.4
White alone, not Hispanic or Latino	185,692	+/-1,293	5.4%	+/-0.3	147,825	+/-1,411	2.3%	+/-0.2	26,914	+/-962	20.4%	+/-1.4
<b>EDUCATIONAL ATTAINMENT OF HOUSEHOLDER</b>												
Less than high school graduate	16,768	+/-708	29.2%	+/-2.5	10,093	+/-564	20.7%	+/-2.4	4,705	+/-427	48.8%	+/-5.1
High school graduate (includes equivalency)	46,010	+/-1,202	10.9%	+/-1.0	32,434	+/-1,015	4.6%	+/-0.7	9,469	+/-649	31.7%	+/-3.2
Some college, associate's degree	78,376	+/-1,387	9.3%	+/-0.7	55,592	+/-1,180	2.9%	+/-0.4	16,874	+/-741	29.6%	+/-2.4
Bachelor's degree or higher	84,725	+/-1,390	2.6%	+/-0.3	72,513	+/-1,284	1.4%	+/-0.2	9,039	+/-541	10.0%	+/-1.9
<b>TENURE</b>												
Owner occupied	171,172	+/-1,493	3.4%	+/-0.3	143,777	+/-1,531	2.1%	+/-0.2	18,630	+/-820	11.0%	+/-1.3
Renter Occupied	54,707	+/-1,216	24.9%	+/-1.0	26,855	+/-946	12.0%	+/-1.3	21,457	+/-833	42.6%	+/-2.0

# **CAROL GILBERT**

# **CITYMATCH**



# Social determinants in Maternal and Child Health

**Carol Gilbert, MS**

*Senior Health Data Analyst*

*cgilbert@unmc.edu*

**citymatch**  
The National Organization of Urban MCH Leaders



# Maternal and Child Health

- History: high infant mortality rate due primarily to infectious disease, associated with poverty
- Vital records system modified to better track infant deaths



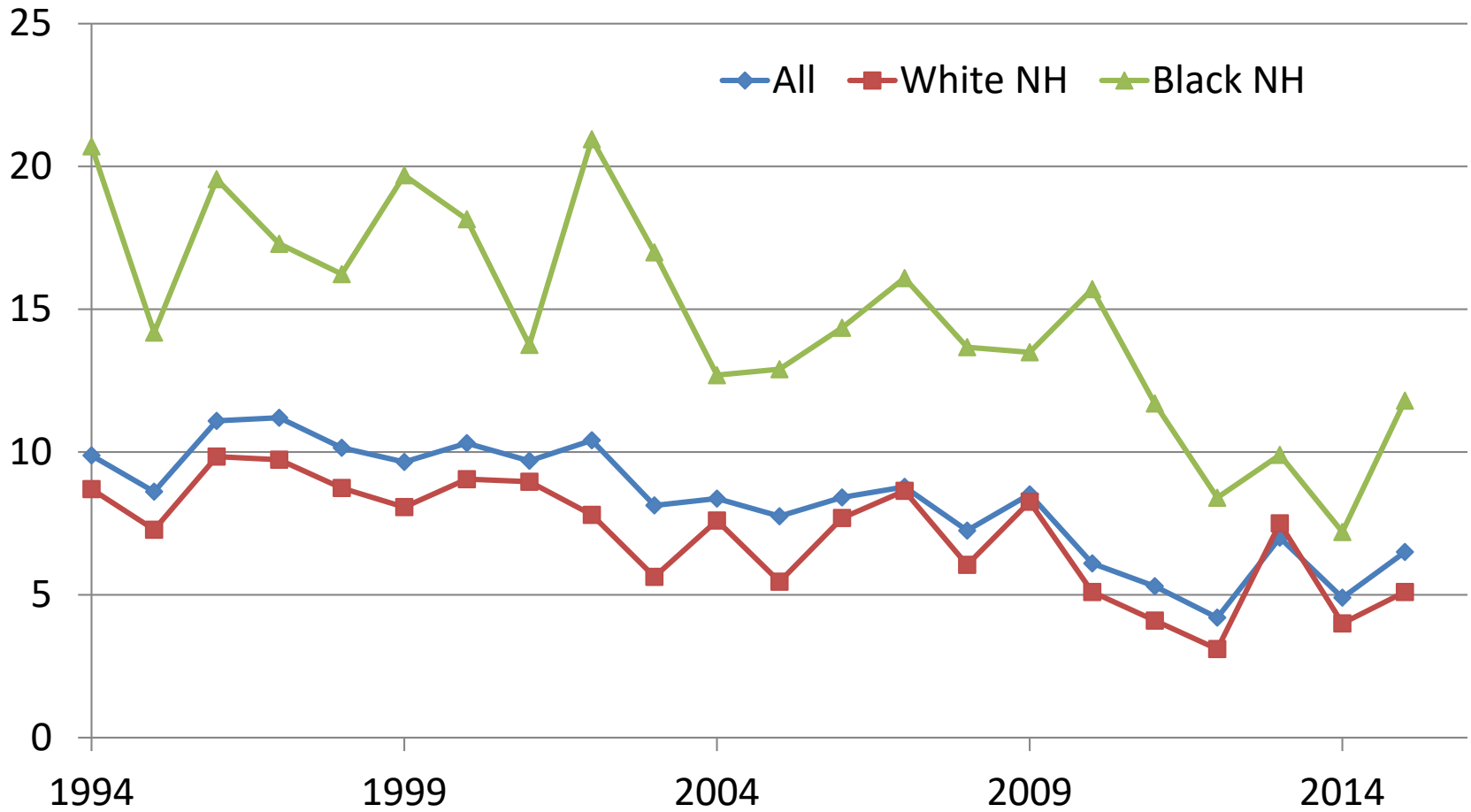


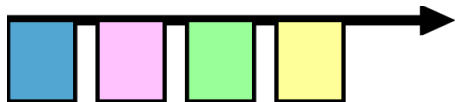
# Maternal and Child Health



- MCH takes a population perspective. Everybody is born, everybody dies.
- Modern MCH focuses on disparities:
  - We value justice
  - Impact on overall

# Douglas County Infant Mortality Rates





What causes infant death?

What causes the persistent gap between whites and African-American infant mortality rates?

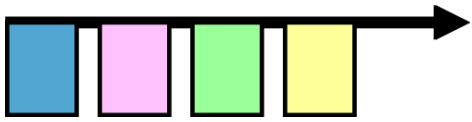
# Why babies die in Douglas County Nebraska

Infant deaths from births during 2007-2013 (7 years) Douglas County, NE	White deaths	Black deaths
#Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	40	13
#Sudden infant death syndrome (R95)	23	16
#Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	19	17
#Newborn affected by maternal complications of pregnancy (P01)	14	20

# Mortality RATES allow comparisons

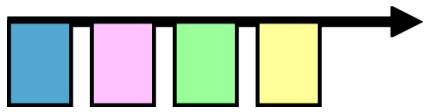
Infant deaths from births during 2007-2013 (7 years) Douglas County, NE	White deaths	Black deaths
<b>Congenital malformations</b> , deformations and chromosomal abnormalities (Q00-Q99)	1.1	1.5
Sudden infant death syndrome (R95)	0.6	1.8
Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	0.5	1.9
Newborn affected by maternal complications of pregnancy (P01)	0.4	2.2
Total	2.6	7.4

National Center for Health Statistics (NCHS), Division of Vital Statistics (DVS). Linked Birth / Infant Death Records 2007-2013



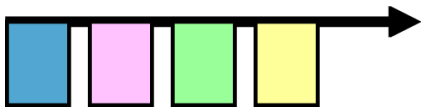
## Further analysis

- Perinatal Periods of Risk analysis showed that nearly half of **preventable** Black fetal and infant deaths were among those born at very low birth weight <3.3 pounds
- Further analysis shows that premature black babies were at least as likely to survive as premature white babies
- In other words, nearly half of the Black/White disparity was due to extreme prematurity in the Black population.



## **Factors often associated with very preterm, birth, measured on birth certificate and PRAMS survey**

- Early prenatal care
- Adequate time between births
- Previous preterm birth
- Overweight/obesity
- Diabetes
- Hypertension
- Smoking
- Teen mom
- Twins/triplets etc
- Sexually transmitted infections
- Maternal educational attainment
- Maternal marital status
- Maternal stress



# Population Attributable Risk Percent

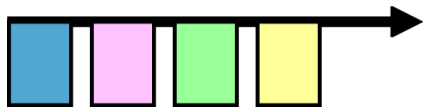
	“Disease”	Not	All
Exposed	a	b	$n_1$
Unexposed	c	d	$n_2$
All	a+c	b+d	$n_0$

$p_2 = c/n_2$  (rate of disease in low risk group)

$p_0 = (a+c)/n_0$  (rate of disease in whole population)

**Levin's PAF =  $(p_0 - p_2)/p_0$**





## Risk factors for very low birth weight (VLBW) among Non-Hispanic Blacks in Douglas County

	% VLBW if YES	%VLBW if NO	PAR
Late entry into prenatal care	2.2%	2.4%	-4.2%
Teen birth vs all other	1.7%	2.8%	-4.2%
Diabetes	2.1%	2.7%	-1.1%
Tobacco use	3.2%	2.6%	2.8%
HS or less education	2.8%	2.6%	3.4%
Hypertension	8.1%	2.3%	5.0%
Pregnancy hypertension	6.5%	2.5%	7.0%
Unmarried	2.6%	2.2%	11.0%
Twins triplets etc	12.8%	2.0%	16.8%

Source: CDC Wonder 2011-2015 (rare factors used 2007-2015)

# Factors with largest impact on very low birth weight

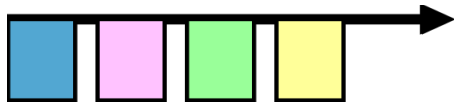
PRAMS data are from 2008-2011, Douglas County estimates

	Prevalence among Ref Group	Prevalence among Black	PAR among Black
Income below \$15,000 per year (PRAMS)	9%	63%	21%
Stress: separation or divorce (PRAMS)	3%	13%	10%



**Interpretation of PAR: if we could reduce the risk of low income moms by to the same low risk as higher income moms, the very low birth weight rate would decrease by 21%.**

**What is the meaning of these factors of these social factors having a large impact?**



Census data can help us explore further, to determine more specifically what the high risk groups are coping with:

- poverty,
- employment,
- educational attainment
- health insurance

and it can be broken down

- by neighborhood
- by presence of children
- by having given birth in the past year

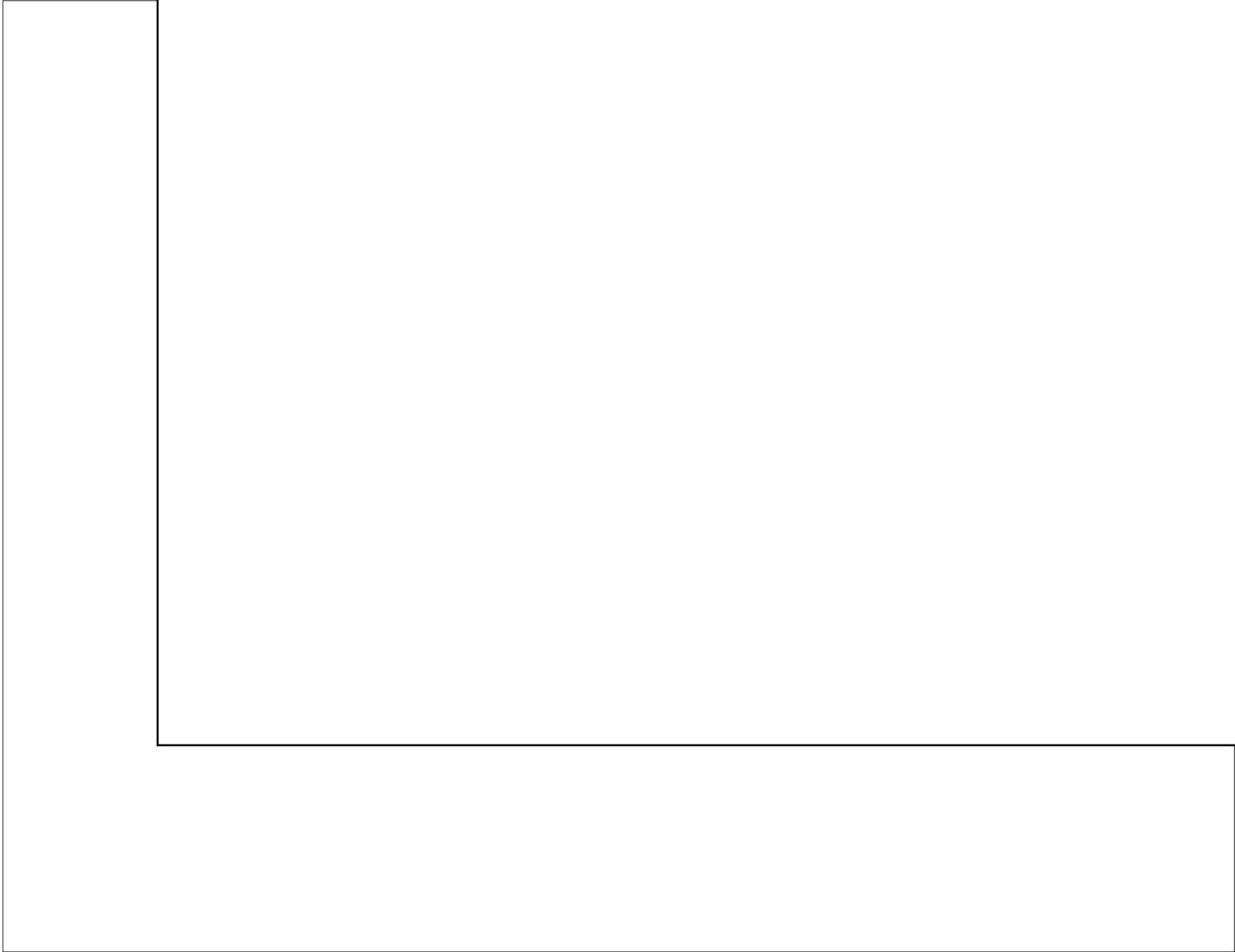


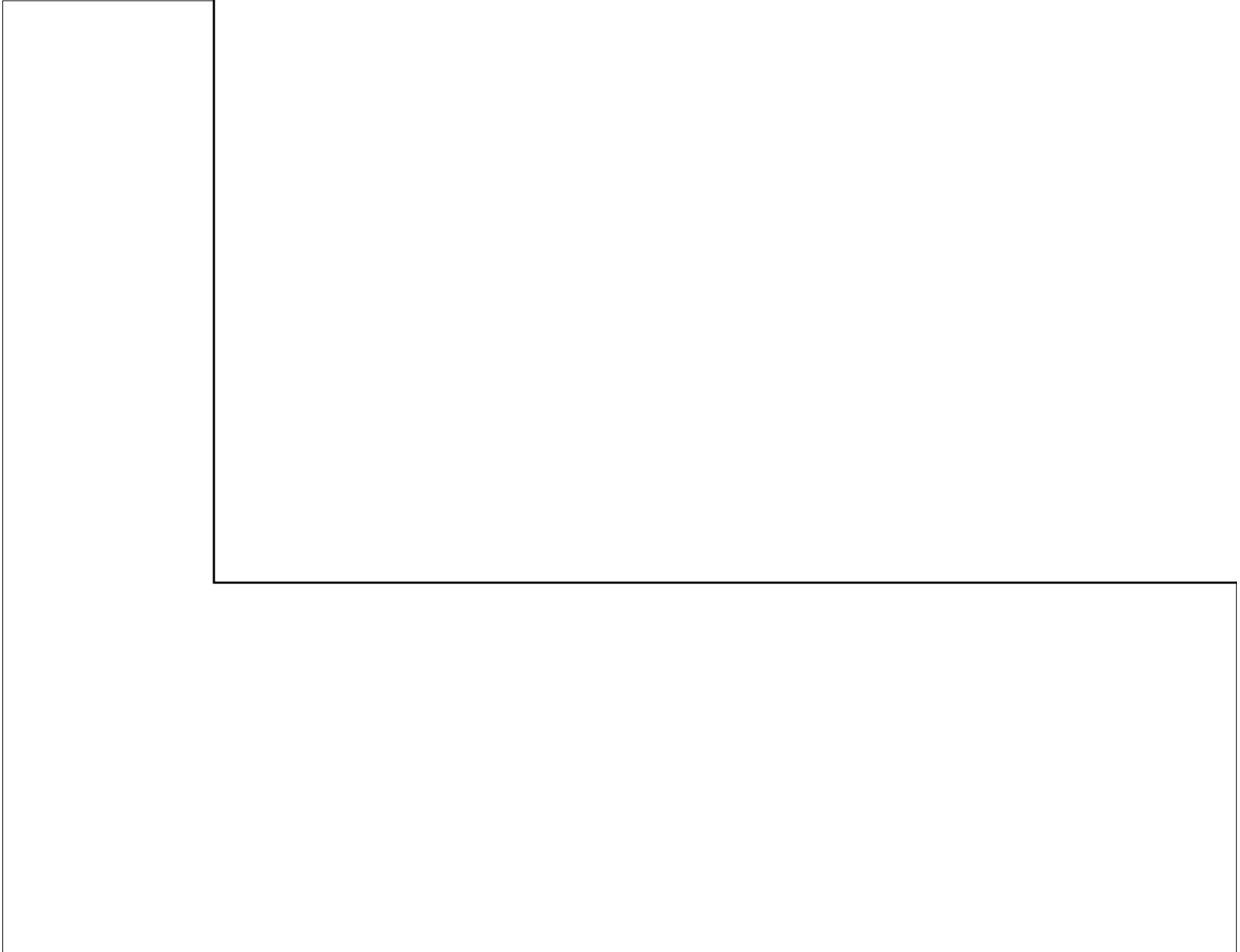
**TOM RAUNER**  
**NEBRASKA DEPARTMENT OF**  
**HEALTH AND HUMAN SERVICES**



# Health Access

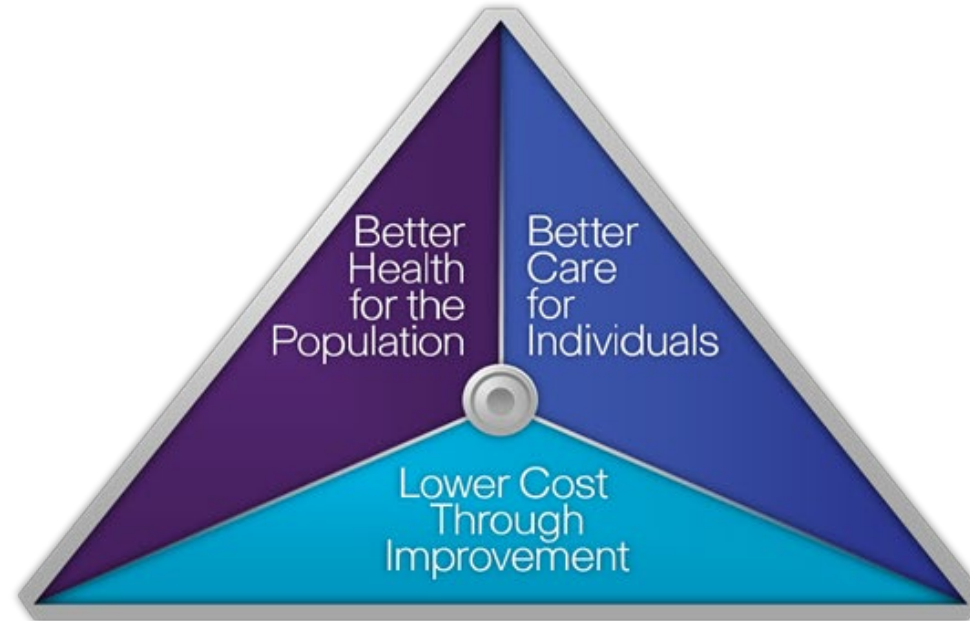
- Safety Net Sites
- The Triple Aim
- Social Determinates of Health







## Making the “Triple Aim” Possible



- Well care replacing sick care
- Value replacing volume
- Community participation
- Individual participation
- Integrated health care participation
- Chronic health care management



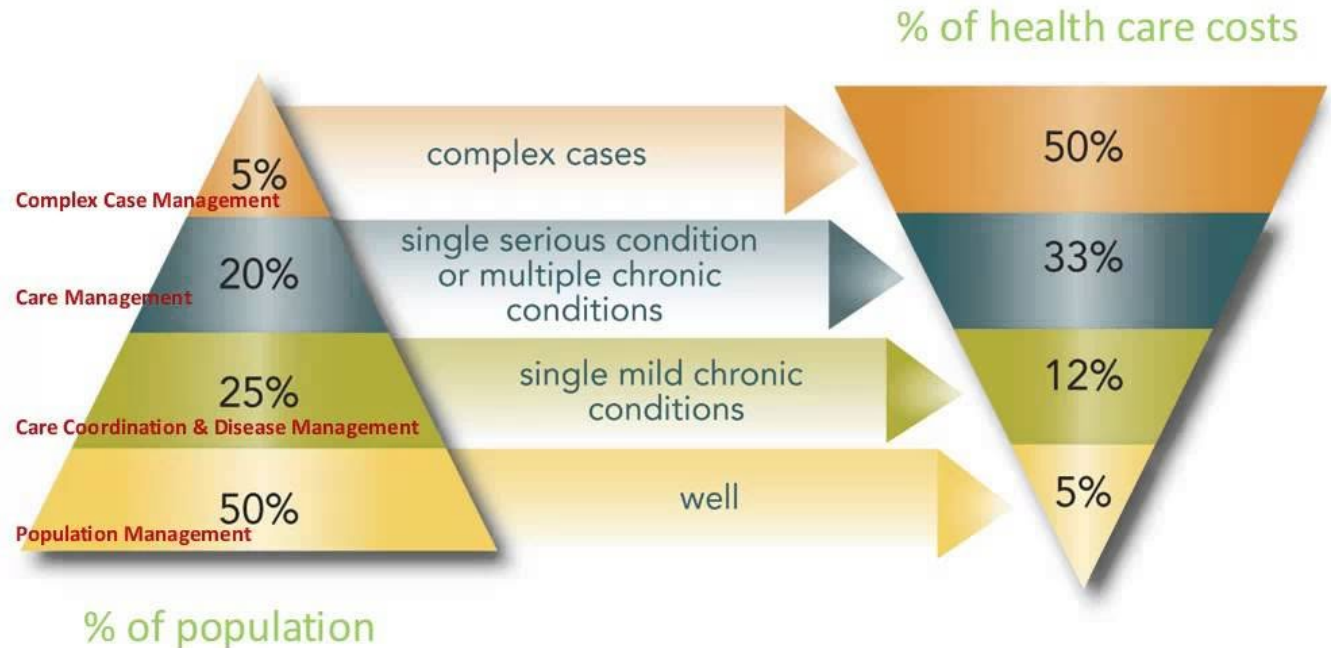


## Program Pathways

Roughly 20%  
Of the population

Accounts for 80%  
Of health care costs

Reducing or delaying  
Chronic conditions is  
A very cost effective  
Measure, but it is not  
Immediate.



EPSTEIN  
BECKER  
GREEN

thought leaders in  
**Population health**

Identifying implementation tactics





## We can address 70% of factors affecting longevity and how well we live

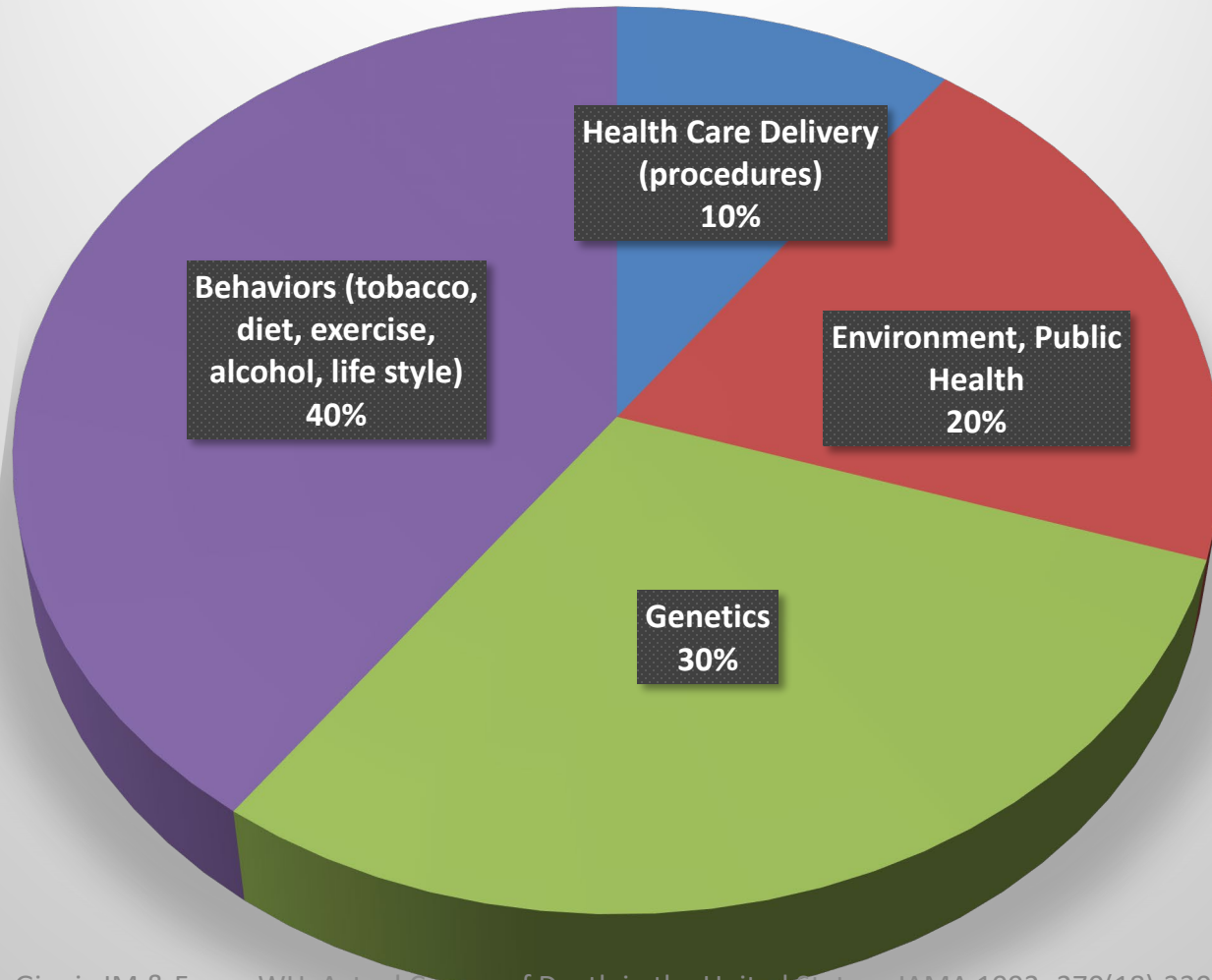
- **Livable communities – opportunity and encouragement around health behaviors**
- **Stress reduction (food, clothing, shelter, health care access)**
- **Quality and affordable healthy food resources**
- **Balanced lifestyle and regular exercise**

**Simplify and easy understanding**





## Total Health: How Long and How Well We Live



McGinnis JM & Foege WH. Actual Causes of Death in the United States. JAMA 1993; 270(18):2207-12 (Nov 10). McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. Health Affairs 2002, 20(2):78-93 (Mar).

**ATHENA RAMOS**  
**UNMC**

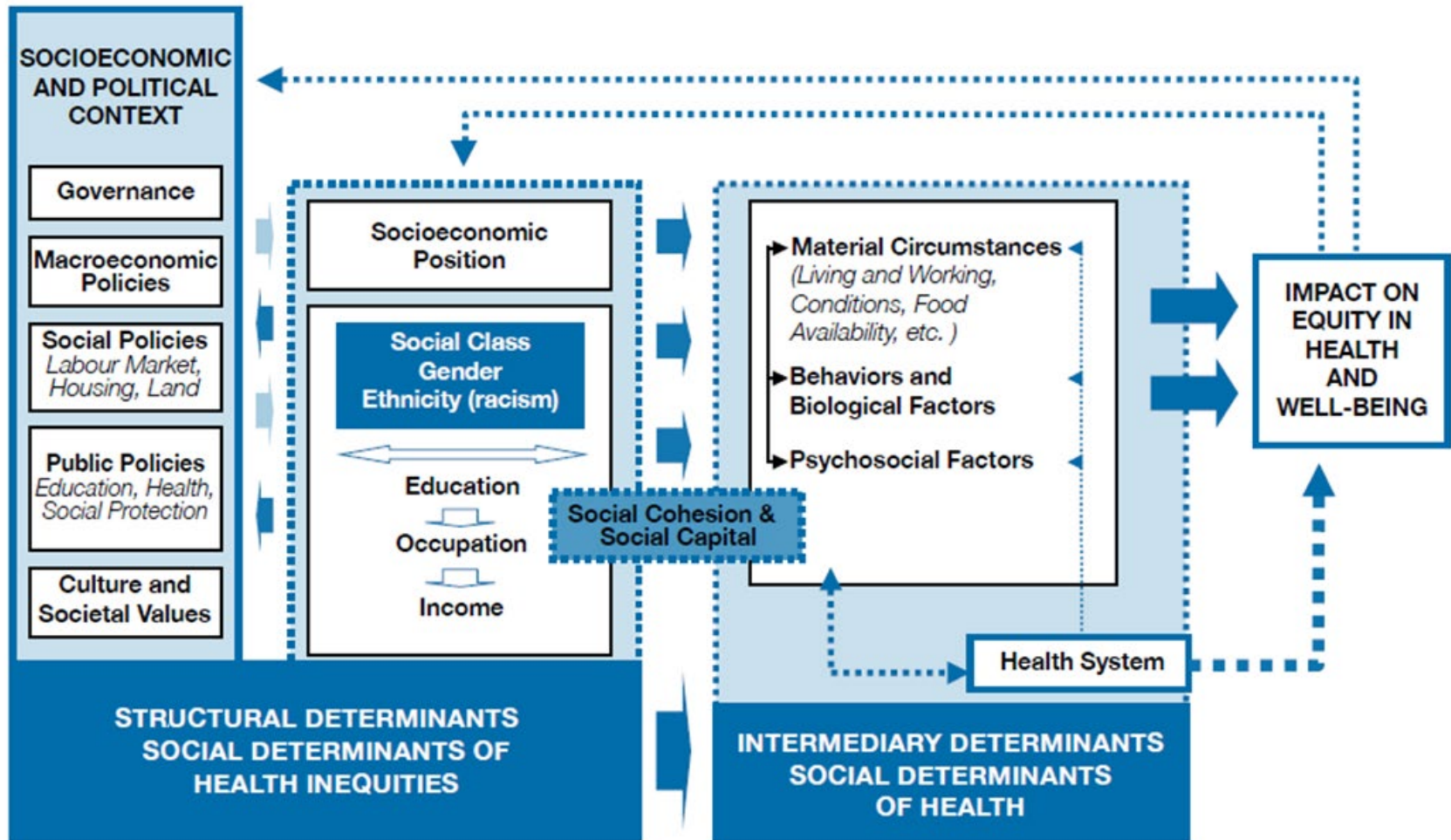
# Definitions

World Health Organization (WHO):

“**Health** is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”

“The **social determinants of health (SDOH)** are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.”

# Social Determinants of Health



Commission on Social Determinants of Health. (2010). *A conceptual framework for action on the social determinants of health*. Geneva: World Health Organization.

# Healthy People 2020 Approach to Social Determinants of Health



## **Economic Stability**

- Poverty
- Employment
- Food Insecurity
- Housing Instability

## **Education**

- High School Graduation
- Enrollment in Higher Education
- Language & Literacy
- Early Childhood Education

## **Social and Community Context**

- Social Cohesion
- Civic Participation
- Discrimination
- Incarceration

## **Health and Health Care**

- Access to Health Care
- Access to Primary Care
- Health Literacy

## **Neighborhood and Built Environment**

- Access to Foods that Support Healthy Eating Patterns
- Quality of Housing
- Crime and Violence
- Environmental Conditions

# Social Determinants of Health

- Overview
- Objectives
- Interventions & Resources
- National Snapshots

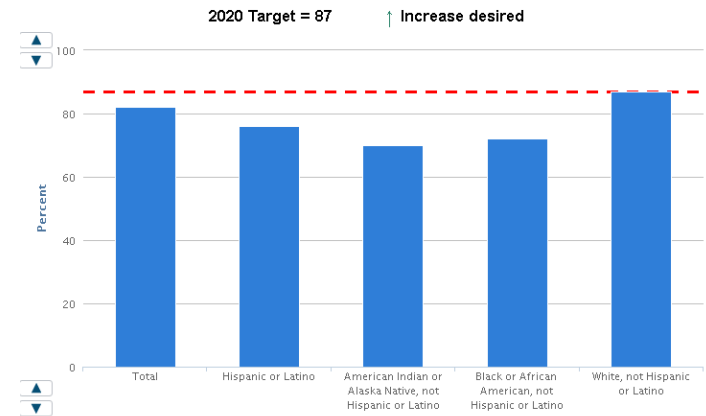
Expand All Objectives +

## Economic Stability

- SDOH-1** Proportion of children aged 0-17 years living with at least one parent employed year round, full time Revised +
- SDOH-3** Proportion of persons living in poverty
  - SDOH-3.1** Proportion of persons living in poverty Revised +
  - SDOH-3.2** Proportion of children aged 0-17 years living in poverty Revised +
- SDOH-4** Proportion of households that experience housing cost burden
  - SDOH-4.1** Proportion of households that spend more than 30% of income on housing
    - SDOH-4.1.1** Proportion of all households that spend more than 30% of income on housing Revised +
    - SDOH-4.1.2** Proportion of households earning less than 200% of the poverty threshold that spend more than 30% of income on housing Revised +
  - SDOH-4.2** Proportion of households that spend more than 50% of income on housing
    - SDOH-4.2.1** Proportion of all households that spend more than 50% of income on housing Revised +
    - SDOH-4.2.2** Proportion of renter households that spend more than 50% of income on housing Revised +
- NWS-12** Eliminate very low food security among children
- NWS-13** Reduce household food insecurity and in doing so reduce hunger

**AH-5.1** Students graduating from high school 4 years after starting 9th grade (percent)  
By Race/Ethnicity UHI

Year: 2013-2014



At baseline, 79 percent of students attending public schools graduated with a regular diploma in 2010–11 4 years after starting 9th grade. The target is 87 percent, based on a target-setting method of 10 percent improvement.

Data Source: Common Core of Data (CCD), ED/NCES

Note: Further information about the data used to track this objective is available on the [Data Details page](#). Additional footnotes may apply to the objective data and to the population subgroups, if any, that appear in this National Snapshot.



# Data Can Improve Health Equity Efforts

**We need to track data on the social determinants of health.**

## DATA CAN...

- Drive better decision-making at the local, state, and national levels
- Enhance the quality, efficacy, and accessibility of services provided by community organizations, healthcare organizations, and other stakeholders
- Be used to assess community progress and continued areas for improvement

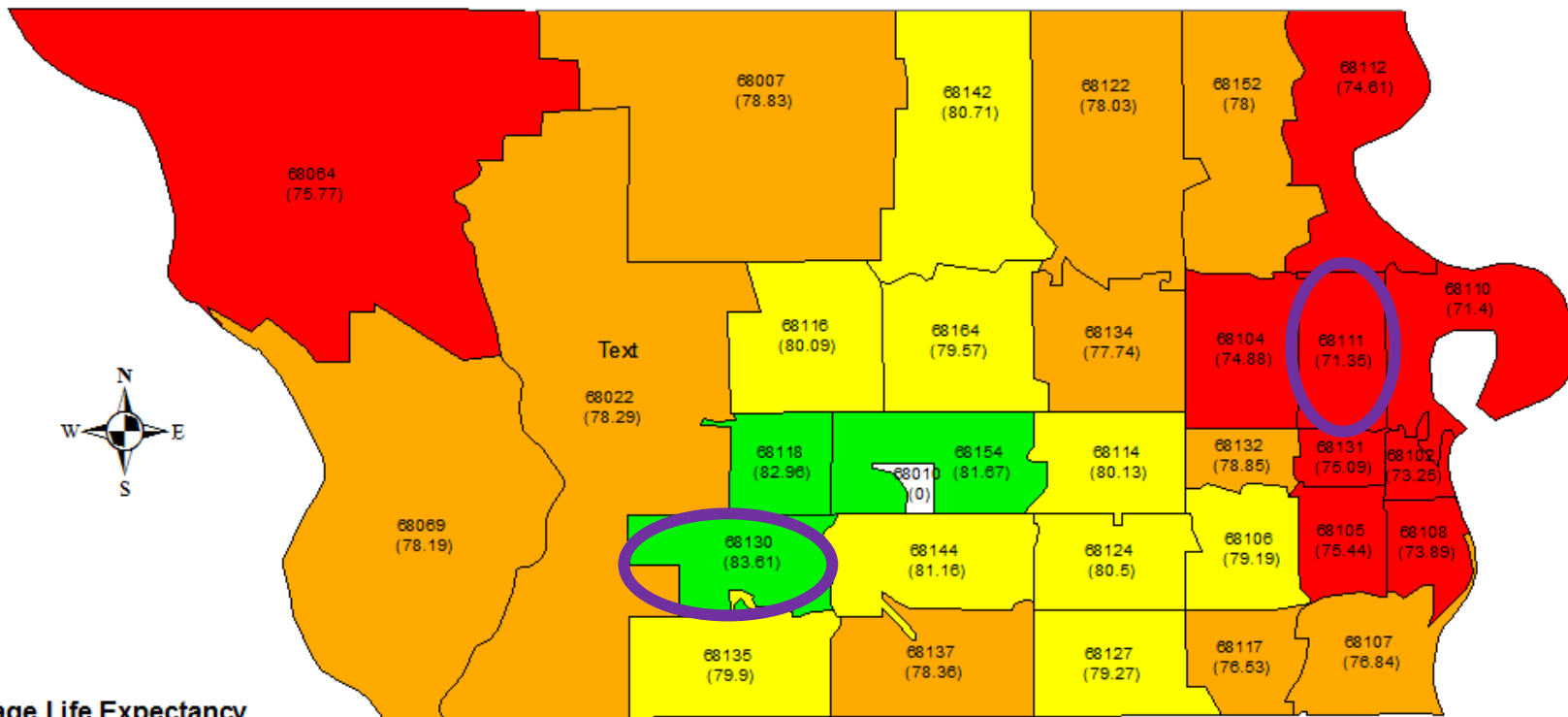
Better Health



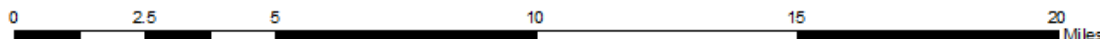
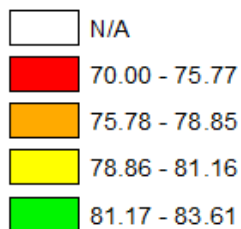
# 2011-2015 Average Life Expectancy at Birth By Zip Code

Douglas County, NE

Overall Life Expectancy at Birth is 78.11



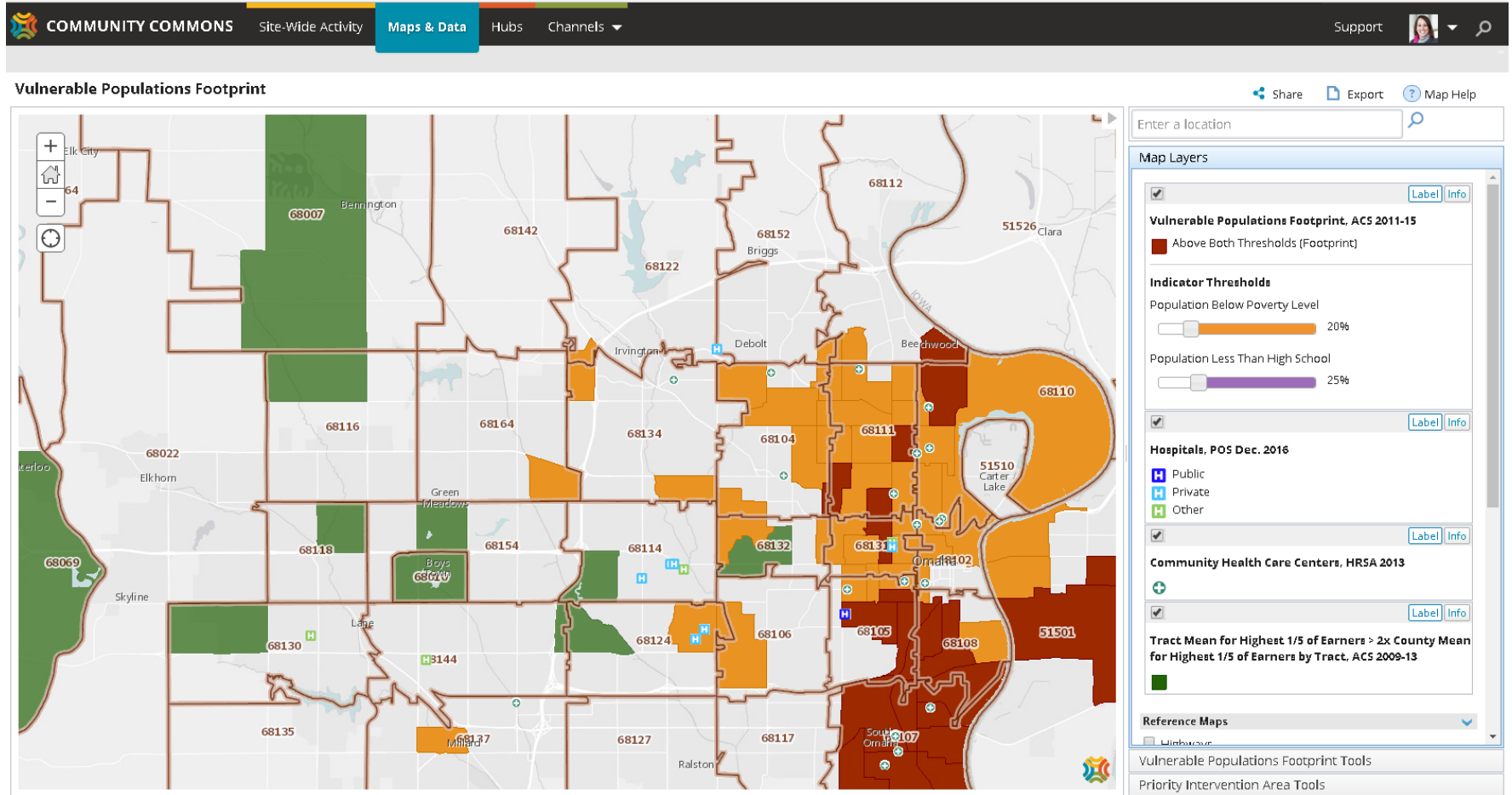
Average Life Expectancy at Birth



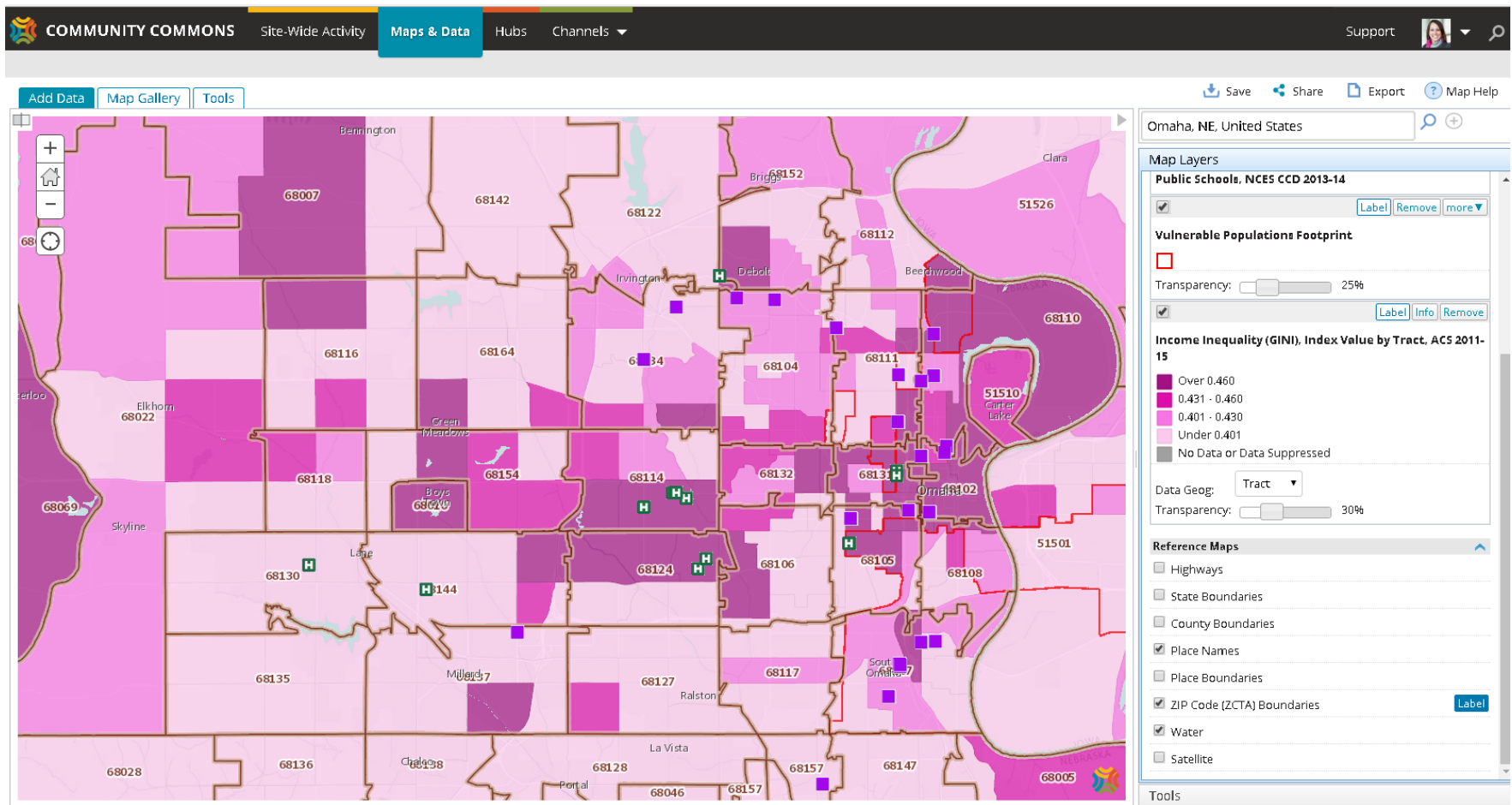
**More than 12 years difference in  
life expectancy in Douglas County!**

# Community Commons

## Vulnerable Populations Footprint



# Community Commons Income Inequality (GINI), ACS 2011-15



# Douglas County Health Department Community Indicators

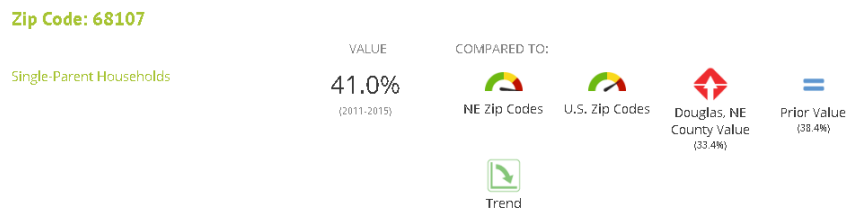
## Health Matters in Douglas County Nebraska



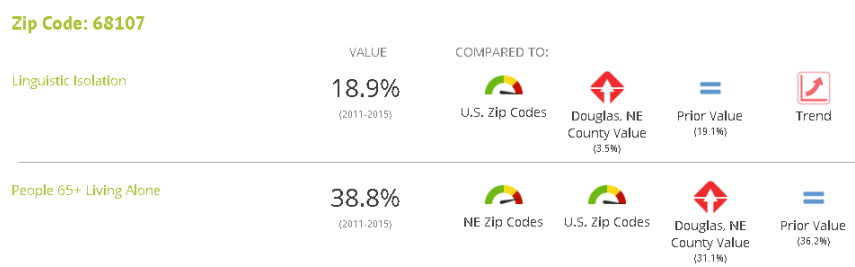
Zip Code: 68107

VALUE COMPARED TO:

### Social Environment / Family Structure



### Social Environment / Neighborhood/Community Attachment



Access to Health Services	Each County vs. Others (Douglas County Sub-County Areas vs. Other Sub-County Areas)								Metro Area	Metro Area vs. Benchmarks					
	NE Omaha	SE Omaha	NW Omaha	SW Omaha	Western Douglas	Douglas County	Sarpy County	Cass County		Pott. County	vs. IA	vs. NE	vs. US	vs. HP2020	TREND
% [Age 18-64] Lack Health Insurance	21.6	19.6	4.5	2.6	6.1	10.8	5.3	8.2	6.5	9.1	12.7	17.6	15.1	0.0	12.1
% [Insured] Went Without Coverage in Past Year	10.7	9.2	5.5	4.2	1.7	6.5	5.4	3.3	5.4	6.0		8.1		5.5	
% Difficulty Accessing Healthcare in Past Year (Composite)	42.2	39.3	34.2	34.2	25.2	36.4	26.4	31.4	33.4	33.9		39.9		33.4	
% Inconvenient Hrs Prevented Dr Visit in Past Year	17.3	12.2	12.9	16.8	5.1	14.4	11.6	12.1	15.2	13.9		15.4		12.5	
% Cost Prevented Getting Prescription in Past Year	20.4	14.2	12.6	11.5	9.3	14.1	7.0	6.0	13.8	12.4		15.8		14.3	
% Cost Prevented Physician Visit in Past Year	22.0	9.7	8.9	13.6	6.4	13.1	8.4	12.4	14.3	12.3		18.2		14.5	
% Difficulty Getting Appointment in Past Year	16.3	16.3	10.4	11.9	9.0	13.2	8.0	14.4	13.1	12.2		17.0		10.5	
% Difficulty Finding Physician in Past Year	13.0	11.3	9.0	10.1	2.3	10.3	6.1	11.0	8.6	9.3		11.0		6.6	
% Cultural/Language Differences Prevented Med Care/Past Yr	0.8	1.5	0.6	0.6	0.0	0.8	0.0	0.0	0.2	0.5					
% Transportation Hindered Dr Visit in Past Year	13.8	9.1	1.8	3.0	1.3	6.1	1.9	6.0	5.9	5.3		9.4		4.7	
% [Sarcy/Cass/Pott.] Traveled 30+ Min for Medical App/Past Yr						7.8	39.7	19.0		14.6				19.6	

<http://www.douglascohealth.org/>

# Public Health Data Recommendations

1. Analyze mortality and morbidity data to show health disparities, identify causes of death attributable to social and economic factors, and prioritize places and populations for further public health surveillance, intervention, and evaluation.
2. Track morbidity and mortality data in priority places and populations over time to measure progress in affecting the SDOH indicators attributable to these health disparities.
3. Identify the Census tracts in your jurisdiction with a high prevalence of people living below 100% or 200% federal poverty level.
4. Collect, analyze, and interpret indicators including: income distribution, unemployment, housing cost burden, living wage, food insecurity, foregoing health care, violent crime, educational attainment, voter participation, social capital/social support, English language learners, air contamination, access to public transportation, alcohol access, and food access.
5. Track SDOH indicators over time to show improvement, decline, or stagnation in the totality of policies, programs, and procedures related to that indicator for a geography and population over time.
6. Use SDOH data to write competitive funding applications and mobilize community partnerships with organizations traditionally outside health and/or human services.

# Practice Implications

- Engage community members, staff, and other stakeholders in developing your metrics/indicators
- Develop standard protocols that incorporate SDOH data collection from clients/patients

- Example PRAPARE: <http://www.healthcarecommunities.org/DesktopModules/Bring2mind/DMX/Download.aspx?portalid=3&EntryId=98561>


**USE DATA TO MAKE MEANINGFUL CHANGES TO FOSTER HEALTH AND SOCIAL EQUITY**

Name: \_\_\_\_\_ Health Plan #: \_\_\_\_\_

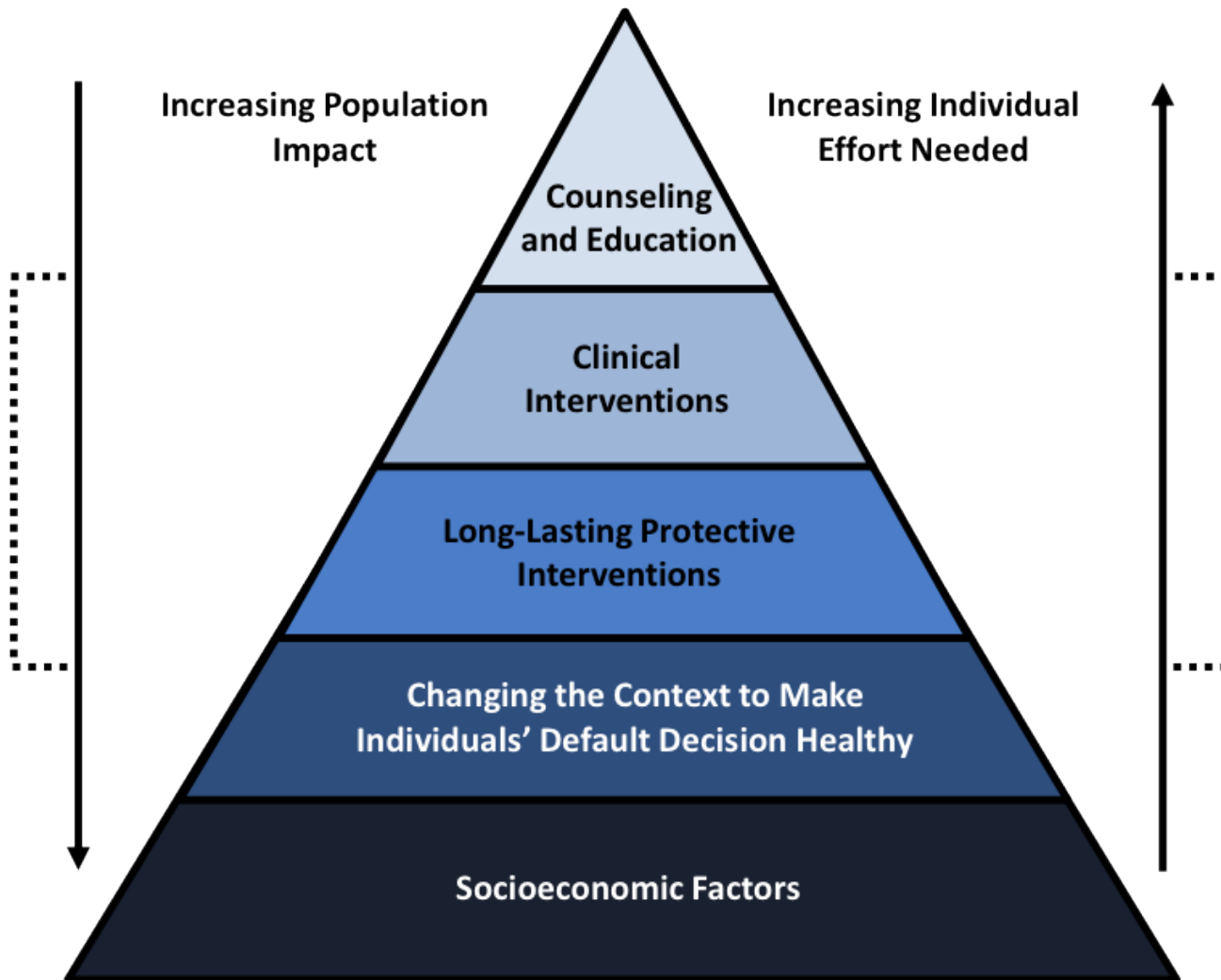
**Your Current Life Situation (Shorter Form)**

Please answer the following questions to help us better understand you and your current situation. The information you provide will be entered into your Kaiser Permanente medical record and will be used by your health care team to develop a plan to help you maintain or improve your health and well-being.

- Which of the following best describes your current living situation? (*Select ONE only*)
  - Live alone in my own home (house, apartment, condo, trailer, etc.); may have a pet
  - Live in a household with other people
  - Live in a residential facility where meals and household help are routinely provided by paid staff (or could be if requested)
  - Live in a facility such as a nursing home which provides meals and 24-hour nursing care
  - Temporarily staying with a relative or friend
  - Temporarily staying in a shelter or homeless
  - Other
- Do you have any concerns about your current living situation, like housing conditions, safety, and costs?
  - Yes →  Condition of housing  Lack of more permanent housing
  - No  Ability to pay for housing or utilities  Feeling safe  Other
- In the past 3 months, did you have trouble paying for any of the following? (*Select ALL that apply*)
  - Food  Housing  Heat and electricity  Medical needs  Transportation
  - Childcare  Debts  Other  None of these
- In the past 3 months, how often have you worried that your food would run out before you had money to buy more?  Never  Sometimes  Often  Very often
- Has lack of transportation kept you from medical appointments or from doing things needed for daily living? (*Select ALL that apply*)
  - Kept me from medical appointments or from getting medications
  - Kept me from doing things needed for daily living
  - Not a problem for me
- If for any reason you need help with activities of daily living such as bathing, preparing meals, shopping, managing finances, etc., do you get the help that you need?
  - I don't need any help  I get all the help I need  I could use a little more help  I need a lot more help
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
  - Never  Almost never  Sometimes  Fairly often  Very often
- Which of the following would you like to receive help with at this time? (*Select ALL that apply*)
  - Food  More help with activities of daily living
  - Housing  Childcare/other child-related issues
  - Transportation  Debt/loan repayment
  - Utilities (heat, electricity, water, etc.)  Legal issues
  - Medical care, medicine, medical supplies  Employment
  - Dental services  Other
  - Vision services  I don't want help with any of these
  - Applying for public benefits (WIC, SSI, SNAP, etc.)
- Who answered these questions?
  - Member alone  Member with someone's help  Family member, friend, or caregiver of member

 KAISER PERMANENTE. v.11-10-16

# Improving Public Health Initiatives





# Social Determinants of Health and Health Data Panel

28<sup>th</sup> Annual Nebraska Data Users Conference,  
9:00-10:00 A.M., August 16, 2017

David Drozd, UNO Center for Public Affairs Research  
402-554-2132     [ddrozd@unomaha.edu](mailto:ddrozd@unomaha.edu)

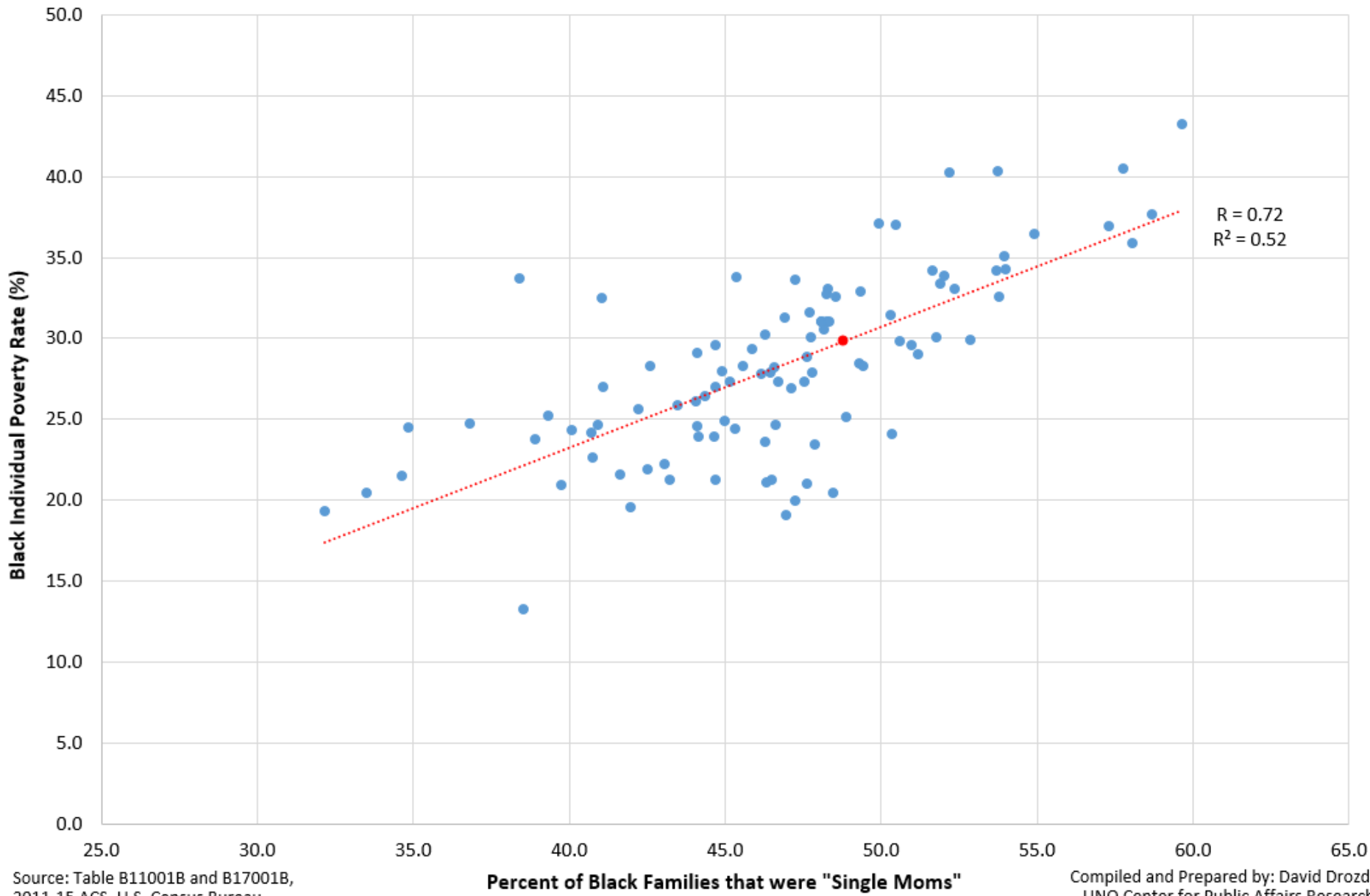
Carol Gilbert, CityMatCH  
402-552-9589     [cgilbert@unmc.edu](mailto:cgilbert@unmc.edu)

Tom Rauner, NE Department of Health and Human Services  
402-471-0148     [thomas.rauner@nebraska.gov](mailto:thomas.rauner@nebraska.gov)

Athena Ramos, UNMC  
402-559-2095     [aramos@unmc.edu](mailto:aramos@unmc.edu)

**EXTRA SLIDES IF NEEDED FOR TIME**

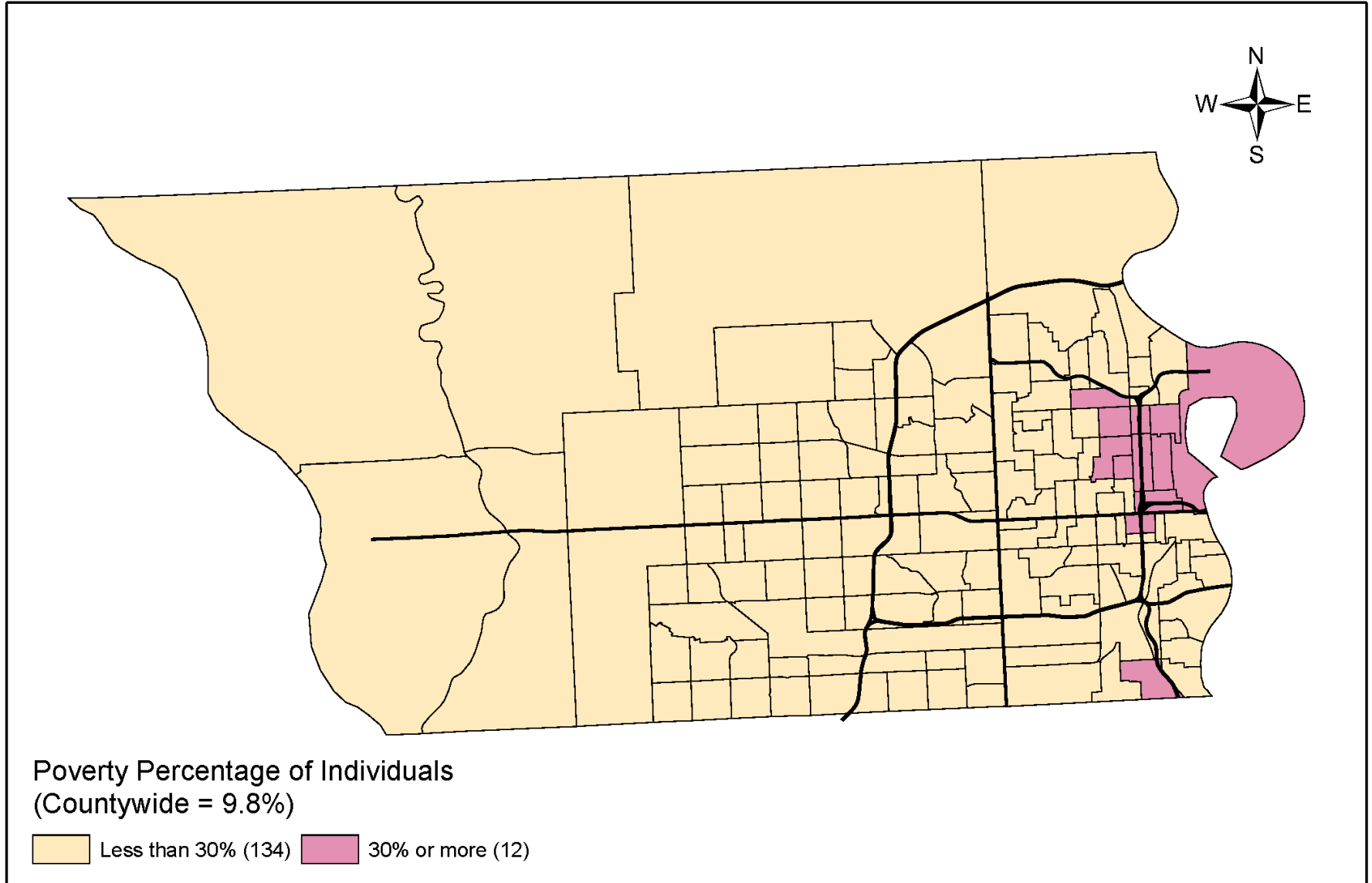
# Scatterplot of Percentage of Black Families that were "Single Moms" versus Black Individual Poverty Rates in the 100 metro areas with the Highest Number of Black Households: 2011-15



Source: Table B11001B and B17001B, 2011-15 ACS, U.S. Census Bureau

Compiled and Prepared by: David Drozd, UNO Center for Public Affairs Research

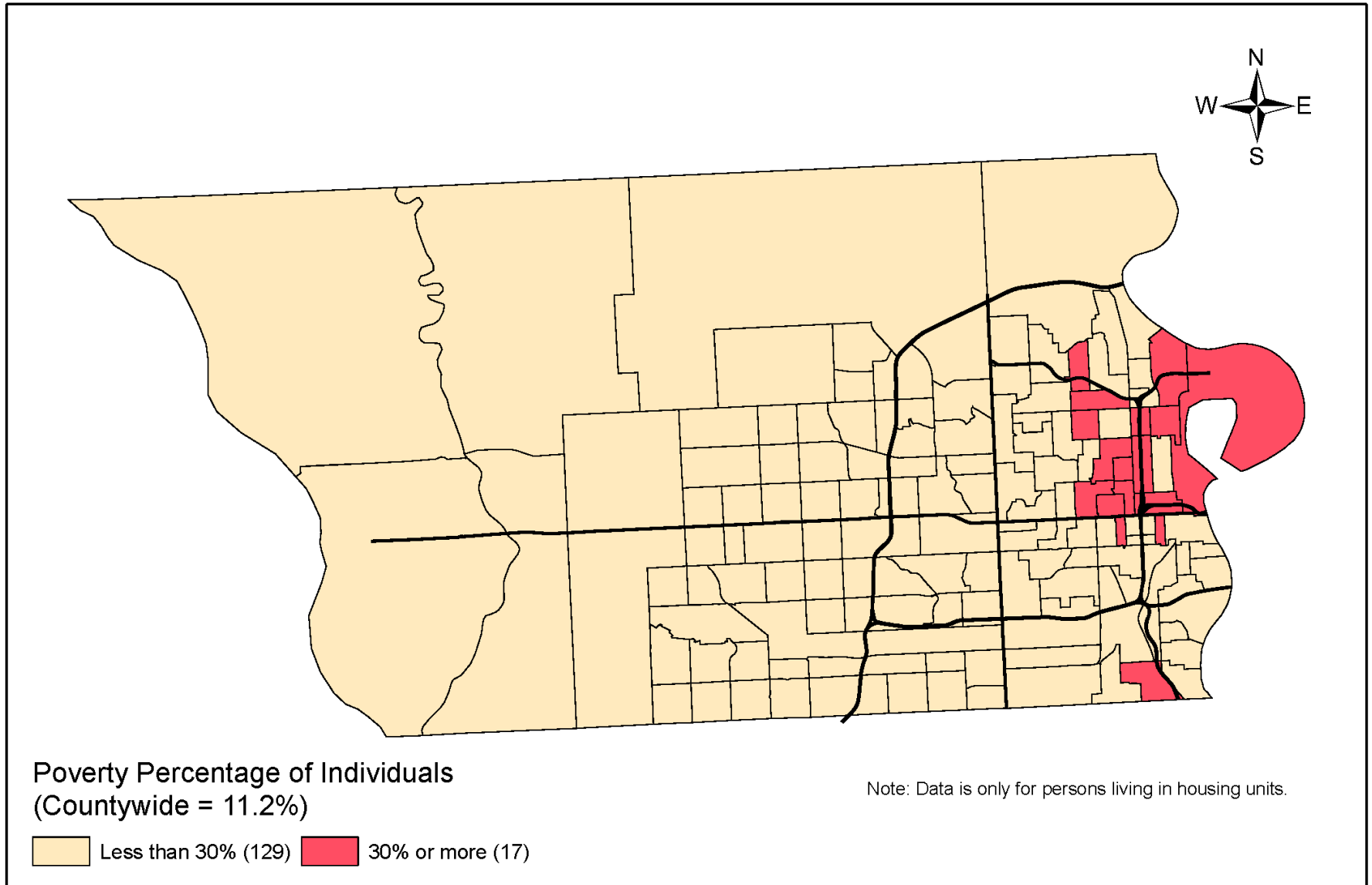
# Percent of Persons in Poverty: 2000



Sources: Census 2000, U.S. Census Bureau; Douglas County Census Tracts

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: May 22, 2007

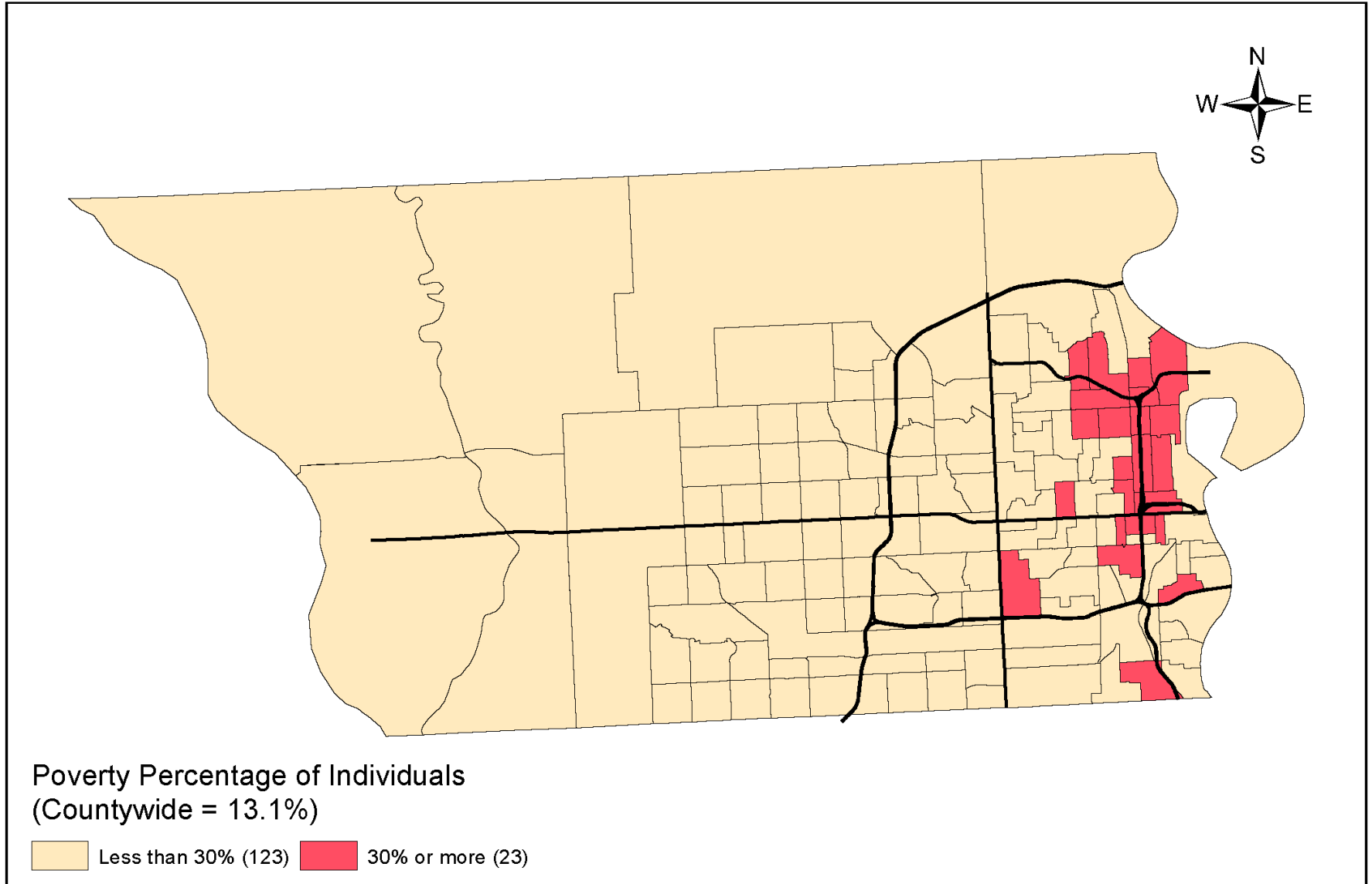
# Percent of Persons in Poverty: 2001 - 2005



Sources: American Community Survey: 2001 - 2005 Aggregate, U.S. Census Bureau; Douglas County Census Tracts

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: May 22, 2007

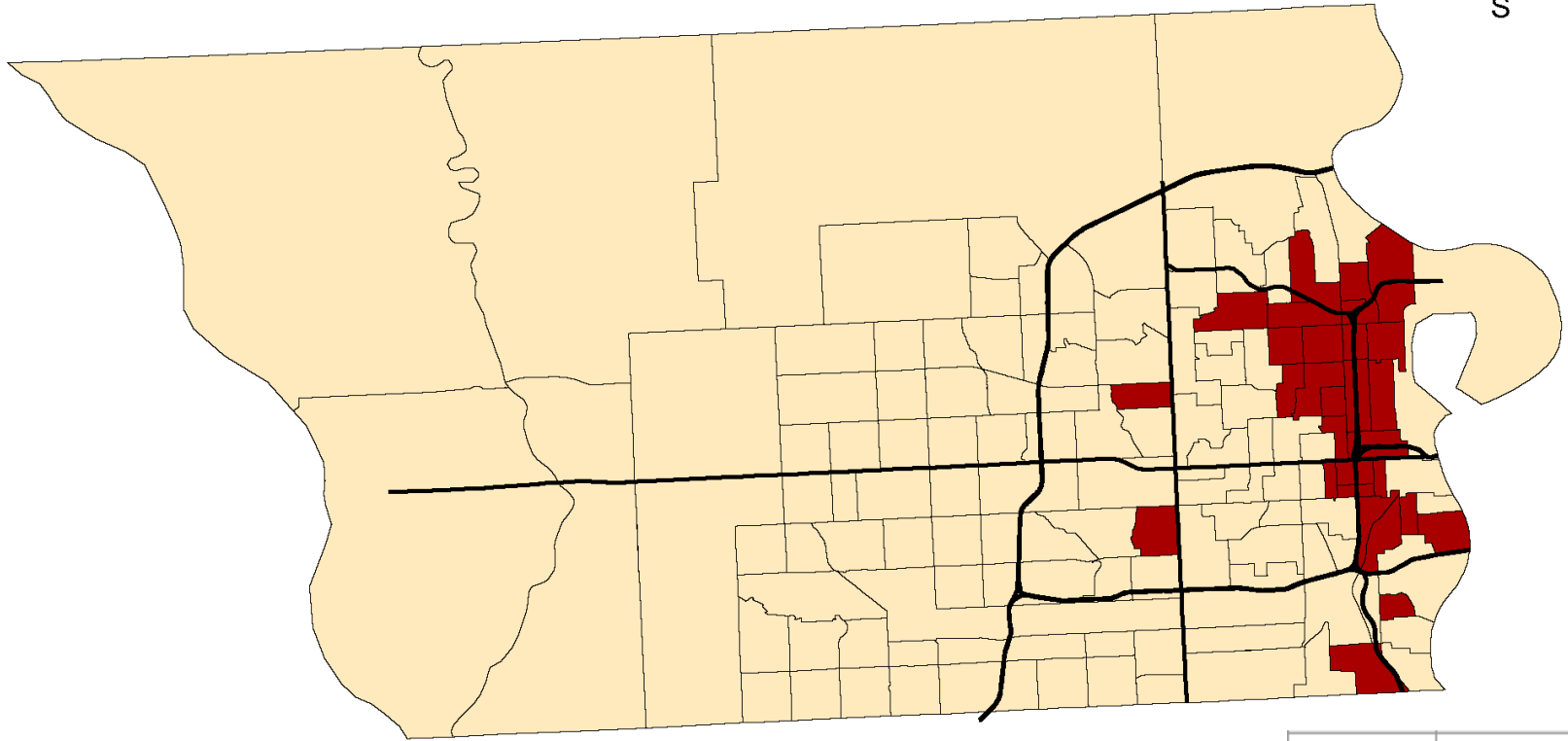
# Percent of Persons in Poverty: 2006 - 2010



Sources: 2006-2010 American Community Survey (aggregate), U.S. Census Bureau; 2000-based Douglas County Census Tracts

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: February 2012

# Percent of Persons in Poverty: 2011 - 2015



**Poverty Percentage of Individuals**  
(Countywide = 14.6%)

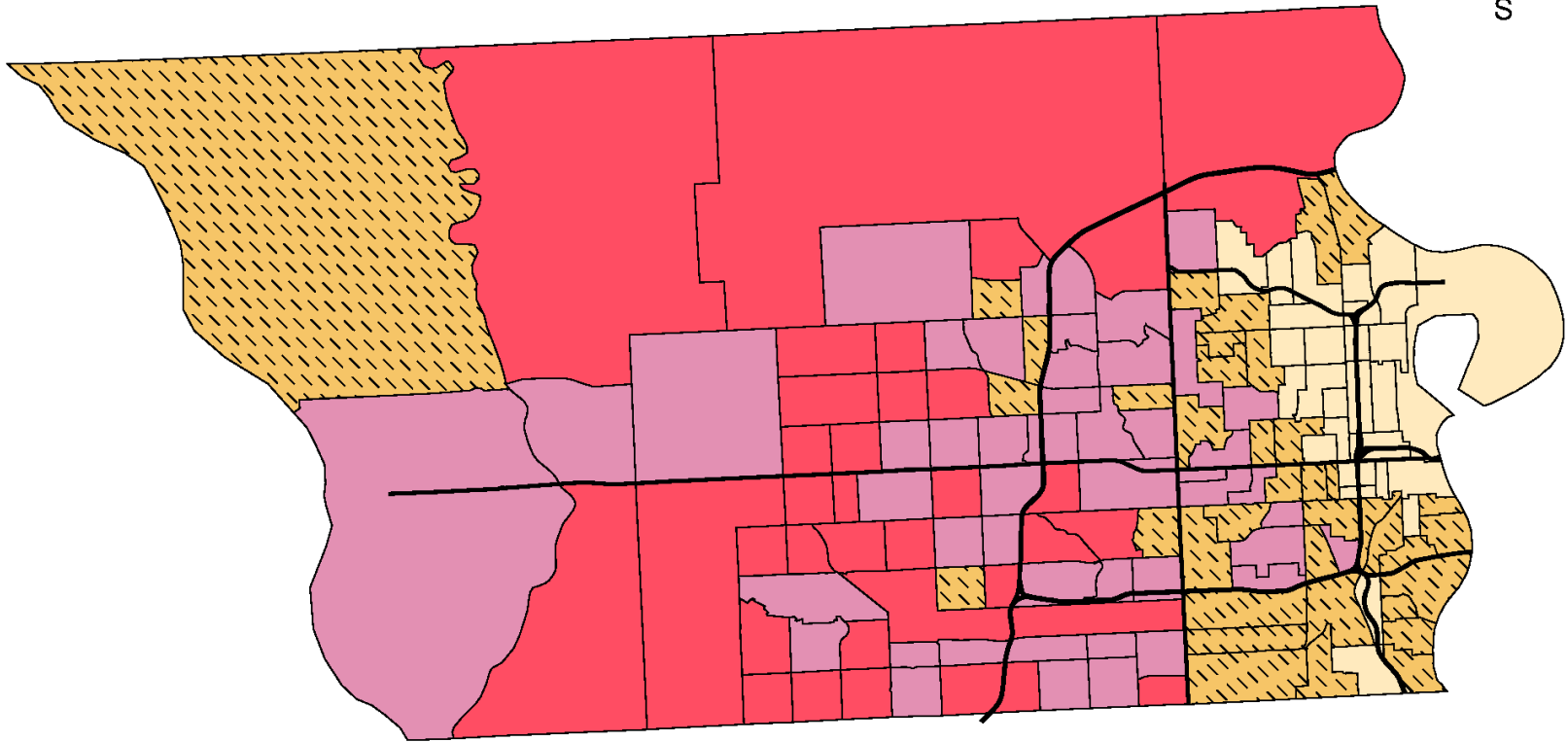
Less than 30% (117)
  30% or more (29)

	68104, 68110, 68111	
	Individual Poverty Rate (%)	Family Poverty Rate (%)
Timeframe		
2007-11	27.2%	22.6%
2008-12	28.5%	22.7%
2009-13	29.8%	23.6%
2010-14	30.1%	24.4%
2011-15	29.8%	24.6%

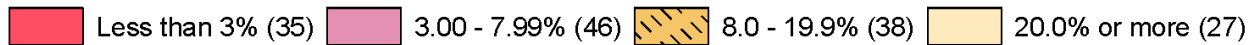
Sources: 2011-2015 American Community Survey (aggregate), U.S. Census Bureau; 2000-based Douglas County Census Tracts

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: February 13, 2017

# Percent of Persons in Poverty: 2000



## Poverty Percentage of Individuals (Countywide = 9.8%)

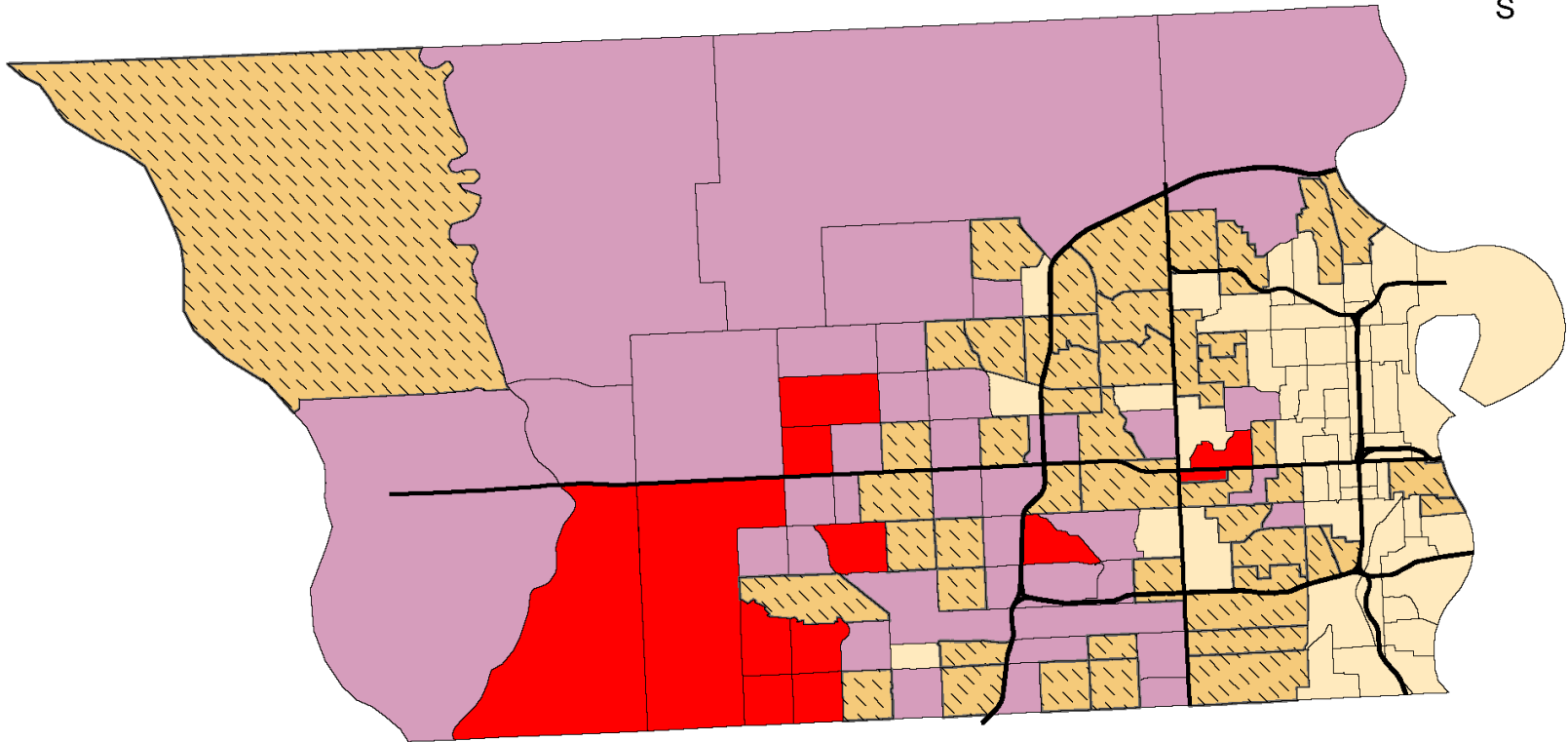


Sources: Census 2000, U.S. Census Bureau; Douglas County Census Tracts

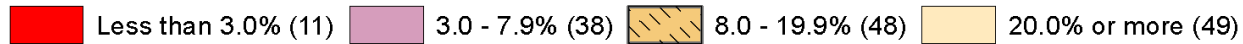
Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: April 11, 2007



# Percent of Persons in Poverty: 2011 - 2015



Poverty Percentage of Individuals  
(Countywide = 14.6%)



Sources: 2011-2015 American Community Survey (aggregate), U.S. Census Bureau; 2000-based Douglas County Census Tracts

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha: February 13, 2017

## 2011-2015 Douglas County Life Expectancy at Birth by Zip Codes

	2011-2015	
Zip Codes	Life expectancy at birth	
68111		71.35
68110		71.40
68102		73.25
68108		73.89
68112		74.61
68104		74.88
68131		75.09
68105		75.44
68064		75.77
68117		76.53
68107		76.84
68134		77.74
68152		78.00
68122		78.03
68069		78.19
68022		78.29
68137		78.36
68007		78.83
68132		78.85
68106		79.19
68127		79.27
68164		79.57
68135		79.90
68116		80.09
68114		80.13
68124		80.50
68142		80.71
68144		81.16
68154		81.67
68118		82.96
68130		83.61
*68010	--	
Overall		78.10779